

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
15 November 2001 (15.11.2001)

PCT

(10) International Publication Number
WO 01/86545 A2

(51) International Patent Classification⁷: **G06F 17/60**

(21) International Application Number: PCT/US01/14311

(22) International Filing Date: 3 May 2001 (03.05.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/568,384 10 May 2000 (10.05.2000) US

(71) Applicant (for all designated States except US): **CARLSON MARKETING GROUP, INC.** [US/US]; 12755 State Highway 55, Plymouth, MN 55441 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FREDREGILL, Willard, R.** [US/US]; 16729 Indigo Road, Lakeville, MN 55044 (US). **SCHRUM, Harold, E.** [US/US]; 7001 Derby Drive, Chanhassen, MN 55317 (US). **KELLER, Robert** [US/US]; 5024 Clearspring Road, Minnetonka, MN 55345 (US). **JOHNSON, Barbara, A.** [US/US]; 4081 - 43rd Street, S.E., Delano, MN 55328 (US). **KNUTH, Edward** [US/US]; 18105 - 30th Ave., Plymouth, MN 55447 (US).

(74) Agent: **BRUESS, Steven, C.**; Merchant & Gould P.C., P.O. Box 2903, Minneapolis, MN 55402-0903 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian

patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG)

— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG)

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BUSINESS-TO-EMPLOYEE INTERACTIVE REWARD AND REDEMPTION SYSTEM AND METHOD

(57) Abstract:

WO 01/86545 A2

**BUSINESS-TO-EMPLOYEE INTERACTIVE REWARD AND
REDEMPTION SYSTEM & METHOD**

FIELD OF THE INVENTION

5 This invention relates generally to a reward and redemption program. More particularly, the present invention relates to a reward and redemption program implemented by a reward and redemption system that is linked via a communication network with merchant retail purchasing systems and with employee service and incentive/engagement systems implemented to support Employee Relationship
10 Management (ERM) programs within business organizations. The merchant retail purchasing systems include point-of-sale computer systems of the type used in retail stores to perform sales transactions and allow for reward issuance and redemption; on-line interactive web sites that provide personal computer users interactive reward and redemption capabilities resulting from on-line purchases; and on-line Internet
15 and Intranet web sites administered by business organizations that provide interactive award and redemption to their employees for achievement of goals and behaviors contributing to the success of that business. The present invention is a complete reward and redemption program and system that combines a consumer loyalty program operable in retail stores and/or on-line Internet shopping sites with
20 web-based employee engagement and reward systems administered within business entities. Consumer loyalty is built through providing each customer with points for transactions that occur in-store at specified retailer locations and/or for transactions that occur on-line at specific merchant web sites. Employees recognized by peers or supervisors for achieving special goals or for exhibiting desired behaviors are
25 rewarded by receiving points of the same currency and value as those awarded in the retail and e-commerce shopping network. A common account with a common point currency is provided for an individual who transacts in the e-commerce domain, the retail in-store domain and who may also participate in an employee engagement program offered by the individual's employer. By combining the consumer loyalty
30 program with an employee engagement program, the participating retail stores and Internet e-commerce sites acquire new customers and increase revenues driven by employees seeking either to redeem their points earned in the incentive program, and/or from employees desiring to add to their engagement program account balance by earning additional point awards on their consumer purchases. Likewise,
35 consumers participating in the loyalty program who become employees of businesses or organizations participating in the engagement program may combine the points earned in the retail network with those offered by the employee engagement program, and may redeem those points within the engagement program's reward system.

BACKGROUND

Traditionally, in a retail environment, retailers and manufacturers build customer loyalty to goods and services offered for sale through advertising and coupons. Many manufacturers distribute coupons for their products, either through the mail, by printing them in newspapers or magazines, or enclosing them in similar or related product packages. Presently, there are point-of-sale systems which assist manufacturers with coupon distribution by printing redeemable coupons at the point-of-sale terminal for immediate delivery to the customer. These systems are designed specifically for putting discount coupons for selected products in the hands of a customer who uses some competing product. Another type of loyalty reward program is one administered through the use of a credit instrument as disclosed in U.S. Patent No. 5,025, 372 to Burton. In that system, a credit instrument is provided and bonus credit value is awarded based on a formula in which a price paid for merchandise is a parameter. Thus, upon each purchase of certain items, credit value is awarded and accumulated. The participants in the program can use the credit value accumulated to make purchases with the credit instrument.

With the advent of electronic commerce made possible by the rapid expansion of Internet/World Wide Web and browser technologies, another type of award program has emerged and is disclosed in U.S. Patent No. 5,774,870 to Storey. The Storey patent discloses a fully interactive on-line frequency and award redemption program. The system disclosed in the Storey patent provides on-line access to product information, allows for product purchases using an electronic ordering form and provides award and redemption options using an on-line electronic redemption order form. As a result of the introduction of on-line frequency and award redemption programs, merchants that also have electronic storefronts and utilize traditional point-of-sale type loyalty programs such as those disclosed in U.S. Patent No. 4,941,090 to McCarthy, U.S. Patent No. 5,923,016 to Fredregill et. al. and U.S. Patent No. 5,025, 372 to Burton are seeking ways to attract traffic and build customer loyalty to their electronic storefronts. Many of these merchants have established a presence in the physical marketplace with their retail outlets, and are implementing commerce web sites on the Internet to augment and/or replace their physical retail outlets. A need exists for a single loyalty program with the capability to span both domains, such that a retailer participating in such a program has a competitive advantage in both the electronic commerce and the retail marketplace environments. This system should provide incentives to customers for items and services purchased at the point-of-sale and on-line at interactive web sites. It must also provide incentives to customers for other types of activities for which awards are earned. Standalone employee engagement programs offering point

rewards for special achievements and behaviors will be enhanced by enabling the exchange (fungibility) of points with the retail loyalty network, in either the in-store retail domain or in the e-commerce storefront domain, or both. Conversely, loyalty points earned by a consumer in the in-store retail domain or the e-commerce storefront domain may be redeemed for awards offered by the employee incentives program .

The perceived value of point rewards offered by employee incentive programs will be increased by virtue of the increased number of options and opportunities for earning and redeeming points in the retail/e-commerce network.

10 The additional opportunities for earning points will enable the employee and the consumer to acquire meaningful rewards in a compressed time period, and can be leveraged as a recruiting tool to attract potential employees to a business organization.

15 SUMMARY

The present invention provides a computer implemented real-time transaction point accumulation system in which an award program participant earns and accumulates points immediately in a centralized data storage for transactions at any one of a plurality of point servers networked to a host incentive award system.

20 The point accumulation servers may be comprised of at least one in-store service system, including a point-of-sale system, at least one on-line interactive consumer web site server and an interactive employee engagement and incentive web site server. The host incentive award system includes at least a host processor, and centralized data storage electrically coupled to the host processor. The centralized

25 data storage includes a plurality of award program participant records, and each of the award program participant records includes at least a program participant point balance. The host communicator is electrically coupled to the host processor and receives requests for the award program participant records from the point servers and transmits at least the point balance to the point servers. The in-store system

30 server, consumer web site server and employee engagement and incentive web site server each processes transactions to determine points earned on the transactions. These point servers cause the point balance stored in the centralized data storage to be immediately updated by transmitting in real-time at the conclusion of each transaction the points earned to the host processor. The points earned for each

35 transaction are added to the point balance stored within each participant record to create an updated point balance in the participant record stored in the centralized data storage.

The system's online interactive consumer web site server is comprised of at least a web site server, web site data storage that is electrically coupled to the web site server and a web site communicator electrically coupled to the web site processor. The web site communicator transmits requests for award program participant account data from the centralized data storage and retrieves from the centralized data storage award program participant account data which includes at least an award point balance and stores the data in temporary data storage for use by the web site server. The interactive web site calculates the points earned for each award and transmits the points earned in real-time at the conclusion of a transaction to the host processor. The points earned for each transaction are added to the point balance stored in each program participant record to create an updated point balance in the program participant records stored in the centralized data storage.

The interactive employee engagement and incentive web site server provides individuals within an organization with the ability to be awarded points immediately in the centralized data storage for achieving goals and exhibiting behavior deemed desirable to the organization. The web site server includes a web site processor, web site data storage electrically coupled to the web site processor, and a data input device electrically coupled to the web site processor for interactive communication with the web site processor. The interactive employee engagement and incentive web site server interactively awards points to an organization nominee member upon the request of an organization nominator as an incentive. The points awarded are immediately transmitted to the centralized data storage and added to the points previously stored in the organization nominee member record to create an updated organization member account point balance that is immediately available for redemption in exchange for products and services at participating retailer systems networked to the host incentive award system. It is to be understood that a program participant record and an organization nominee record may be the same record in one embodiment. In an alternative embodiment, a program participant record and an organization nominee record are two separate records that are linked to allow for immediate access to points in either account. The web site server includes the ability to notify the organization nominee member of the incentive and points awarded via email, inner-office mail, or U.S. or private mail. The organization server awards behavior currency to an organization nominee member at the request of an organization nominator member as an award for the nominee exhibiting certain behavior that the organization encourages. The organization nominee member and the organization nominator member are both employees of the organization.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention may be more completely understood in consideration of the following detailed description of the invention in connection with the accompanying drawing, which are incorporated in and constitutes a part of this specification, in which:

FIG. 1 is a networking diagram illustrating the various computer components of the system in accordance with the invention;

FIG. 2 is a functional diagram illustrating system functions of an Internet e-commerce system;

FIGs. 3a, 3b and 3c are flow charts depicting the logical flow of an in-store points redemption system in accordance with the principles of the invention;

FIGs. 4a, 4b is a flow chart illustrating an embodiment of the on-line enrollment process of the present invention;

FIG. 5 is flow charts depicting the logical flow of the shopping functions within the interactive web site portion of the system in accordance with the principles of the invention;

FIGs. 6a, 6b and 6c is a flow chart depicting the logical flow of the purchase finalization function within the interactive web site portion of the system in accordance with the principles of the invention;

FIGs. 7a and 7b are flow charts depicting the logical flow of the self-service ERM enrollment process;

FIGs. 8a, 8b and 8c are flow charts depicting the logical flow of a peer-to-peer recognition process;

FIG. 9 is a flow chart representing the certificate review process for peer-to-peer recognitions;

FIG. 10 is a flow chart describing the process for the entry of peer-to-peer recognition awards criteria;

FIGs. 11a and 11b are flow charts describing the administrative process for setup of the peer-to-peer recognition sweepstakes;

FIG. 12 illustrates the administrative processes involved in configuring program criteria and budget information for the manager's discretionary recognition process;

FIG. 13a, 13b, 13c, and 13d are flow charts depicting the Manager's Discretionary Recognition process; and

FIGs. 14a, 14b, 14c and 14d are flow charts depicting the logical flow of the processes comprising the employee suggestion module of the ERM program.

DETAILED DESCRIPTION

System Overview

The principles of the present invention provide for a combined computer implemented on-line electronic consumer transaction and employee engagement/incentives point accumulation system in which a consumer and/or an employee of a business organization earns points which are immediately reflected in a central location regardless of where the points are earned. The system that implements the present invention spans the physical and Internet domains by providing a system where a consumer may earn points on transactions occurring in a retailer's store, at a retailer's Internet based web site storefront, and from individuals or organizations in recognition of certain behaviors. The points earned from individuals or organizations in the embodiment described herein are from peers and/or supervisors at an award earner's place of employment in recognition of certain behaviors or events. The system allows points earned on transactions in any of these three domains to be immediately reflected in centralized data storage. Use of the invention provides a plurality of different retailers which have established a presence in the physical marketplace to enhance their presence and consumer loyalty by providing a means for rewards to be earned in both the physical and Internet domains. The invention also provides retailers and other employers with a means of providing incentive point awards to employees with the points being of the same, common currency as those exchanged in the two loyalty domain thereby enhancing the value of points issued within all three domains. The rewards earned in all three domains are all maintained on one system. No distinction is drawn between rewards earned in a central host system domain in comparison to rewards earned in the others. The system provides merchants and employers with the ability to develop consumer loyalty and enhanced employee relationships beyond what could be achieved solely in their respective domains. Participating merchants and organizations may fall into one of several categories: (1) electronic commerce interactive web site only, (2) physical store location(s) only, (3) a physical store location(s) and an electronic commerce interactive web site on the Internet commerce, (4) employee engagement/incentives program only, or (5) any combination of (1) through (4). Supported by a network of non-competing retail partners in both the physical and Internet domains, use of the invention allows retailers to increase revenues and profitability by assisting in the retention of loyal shoppers and acquiring new customers. Retail partners are offered additional opportunity to acquire new customers by virtue of employee engagement/incentives participants seeking to redeem points issued by their employer in the retail domains. The combined loyalty and employee engagement/incentives program implemented

by a preferred embodiment of the system constructed according to the principles of the present invention, spans the physical and computer network domain, including both Intranet and Internet domains. Transactions that occur in the physical domain take place in retail outlets, typically at point-of-sale devices. Transactions occurring

5 in computer network domain take place via personal computers, via Internet or Intranet connections to a retailer's interactive e-commerce web site or an employee engagement/incentives program interactive web site. Users may access both the retailer interactive web site stored on the retailer's web commerce server, and the employee engagement/incentives program interactive web site stored on the

10 engagement/incentive program server by the public Internet. The employee engagement/incentive program server may also be accessed by users via a corporate Intranet or private network. It is to be understood that retail outlets are meant to include any establishment from which a consumer may purchase goods or services, including stores, service establishments, catalog outlets and mail order houses. It is

15 also to be understood that an interactive web site includes any Internet based virtual store from which a consumer may purchase goods or services. In the physical domain, system functionality in each retail outlet is implemented by the in-store system controller, system functionality is also implemented in the physical domain by the point-of-sale device, such as a cash register, or through a service desk work

20 station. The service desk is one point of entry into the system through which a customer may enroll in the program, redeem points for certificates, transfer points from one account to another, or have certain administrative functions performed. In the Intranet and Internet domains, system functionality is implemented by the web server processor.

25 To participate in either the loyalty or employee incentives program in either the physical or the Intranet and Internet domains, the consumer must be identified by a unique account identification number. A unique identification number is assigned to a consumer participant during enrollment. There is no required enrollment period which must pass before a consumer may participate in the loyalty program.

30 Consumers may enroll in the program through various methods, including a paper enrollment form provided at participating merchant locations, or via an electronic enrollment form on the interactive web site of a retail merchant or via a program host web site maintained by the loyalty program administrator. Employees may enroll via the interactive web site of an organization that is a member of the

35 employee engagement/incentives program.. It is to be understood that the employee/incentives web site functionality is accessible only to employees of the business entity having implemented the program, but may be accessed from either the private company Intranet or from the public Internet domains.

Although enrollment in the loyalty program or the employee engagement incentives program may be accomplished in various ways, the most common way consumer enrollment information is captured in the physical domain is by use of paper enrollment forms. When the customer completes a paper form, he or she is
5 provided with a point accumulation card that is instantly usable at any one of the plurality of retail stores networked to the program administrator's host system. The account number identified on that card is also immediately accepted by any electronic commerce merchant participating in the program having a web site on the Internet. The merchant sends the paper forms to a data entry vendor, where they are
10 converted to electronic form. The electronic data is then forwarded to the program administrator host system and added to the centralized customer database within the host system. Another source for enrollment data includes information gathered via applications for affinity credit cards. Enrollment data would be captured in electronic form and forwarded to the program administrator host system for entry
15 into the central customer database.

Program enrollment data may also be captured over the Internet. If the consumer has already provided name and demographic data to the electronic commerce merchant for billing or shipping purposes, that information can be used by the electronic commerce merchant to populate the fields of an electronic
20 enrollment form. If that information is not available, the participating electronic commerce merchant may provide electronic forms on their web site. The program administrator host system may also provide these electronic forms which may be accessed through the program administrator's loyalty program e-commerce web site. It is to be understood that the enrollment form could be accessed from the homepage
25 within either the program administrator's loyalty program e-commerce web site or a participating merchant web site, or from other pages within either site. Point of entry is not important as long as the appropriate information is gathered. The user interface simply presents an electronic form and prompts the consumer to enter the information requested on the form. Upon completion of the form, or if the consumer
30 information was obtained from existing data, the data is transmitted to the program administrator host system, and checked against various edit rules for validity. If the data passes the edit checks, the on-line point server within the program administrator host system creates a new account and assigns a unique account number to that account. Successful receipt of the enrollment data may also trigger an electronic
35 response which may include transmitting an email message to the customer advising them of successful receipt of enrollment data and / or transmitting the program account number, which can be used immediately, in either the physical or Internet domains for transactions during the consumer visit to a participating retailer outlet or

retailer web site. The email message also informs the customer that the loyalty program card being mailed will enable the customer to earn and redeem points in either environment. Employee engagement/incentive program enrollment may be captured by the employee incentives program host system via public Internet private
5 Intranet or Extranet connection in a method similar to that described above for participating electronic commerce merchants. Employee profile information may be entered into the system by the employee, a supervisor, a human resources administrator or automatically via an incoming interface from internal human resources or other systems. The system may assign a new account number
10 automatically when the profile data has been entered and validated as described above, or the employee may be prompted to enter an account number to accommodate the situation where the employee has already enrolled as a loyalty program participant within the retail domain. Another embodiment of the invention would allow an existing account number to be linked to the new incentives account
15 number such that transactions occurring in the physical or Internet domains of the loyalty program or information submitted via the Intranet or Internet domain in the employee engagement/incentive program may be linked to create a common account. Successful enrollment in the employee incentives program may also trigger an email to the employee with a description of the program benefits, fungibility of
20 the currency, etc.

Consumers that enroll in the loyalty or the employee engagement/incentives programs are assigned a unique account number and provided with a permanent point accumulation card identifying that account for use in the physical domain at retail stores and service outlets whose point-of-sale equipment is programmed to
25 read the account number from the point accumulation card. The point accumulation card may be a card having a read only magnetic stripe or bar-code positioned on the card. The bar-code or magnetic stripe includes data representing the customers account number. Upon activation of the customer's point accumulation program account, use of the point accumulation card prompts the system to search for the
30 customer's point accumulation account. The card number, which is preferably sixteen digits, includes a persistent six digit ISO (International Standards Organization) number and a check digit.

Generally, the combined loyalty/employee engagement/incentive program implemented with the system works as follows. In the physical domain, each time a
35 customer shops at a retailer store, during check-out or payment for items purchased, the customer's point accumulation card is swiped or scanned through a point-of-sale device magnetic card reader or barcode scanner. The device that reads account data from the point accumulation card is part of the system. The system reads the

customer account number which is encoded on the magnetic stripe or bar-code and sends a request for retrieval of the customer point balance which is linked to the customer account number. The system also includes the ability to handle late card presentation at the point-of-sale and an alternate form of account identification, such as a credit card or driver license number. If alternate account identification is presented by the customer, the system includes a mechanism to identify the customer and the customer account number from the alternate account identification information processed by the system so that a request for retrieval of the customer point balance can be completed. One mechanism that can be used to identify the customer is to link the alternate identification (such as credit card information) to the customer primary account number. When such a link has been established, the host system processes the alternate identification sent by the point-of-sale device and locates the customer account by way of the link between the account number and alternate identification. The host system then sends the primary account number and account information to the point-of-sale device.

Following the request for customer account information, the program administration host system sends at least the customer's current accumulated point balance from a centralized host system data base. The data received is stored at the point-of-sale device in temporary data storage and is displayed in real-time to the point-of-sale device. Similarly, in the Internet/electronic commerce domain, a customer may make purchases through the web sites of participating retailers. The retailer web site, having an interactive homepage, is networked to the host system via a direct connection to the on-line point server or via the program administrator loyalty program e-commerce web server. The retailer web site server queries the on-line point server and retrieves the customer reward account point balance from the host system database.

Consumer transactions that occur via the Internet domain in the combined loyalty/employee engagement/incentive assumes that a consumer has a device for accessing the Internet, for example a personal computer with browser software, WebTv, mobile phone having Internet access capabilities, PDA having Internet access capabilities, etc. When a consumer accesses the Internet, that consumer may enter the URL (Uniform Resource Locator) address of the participating retailer electronic commerce web site and initiate the process to display contents of that "page" on their personal computer. The content corresponding to the primary URL is typically referred to as the "homepage" of that web site, which presents the user with information and a menu of features, displayed either as images or text having corresponding link to a new "page" of information. When an individual participating in the combined loyalty/employee engagement/incentive program

accesses the web server of a participating retailer or employer organization, the system provides the customer with an option to identify themselves as a participant in the loyalty program (at the web site of a participating retailer or the web site of the loyalty program administrator) or a participant in the employee
5 engagement/incentive program (via an Intranet or Internet connection to the employee incentives program host system.). In one embodiment, a customer may identify themselves by entering their loyalty program account number. It is to be understood that use of the account number is only one method of identifying a participating customer or employee and that the step of identifying a customer or
10 employee is not to be limited to the use of the customer account number. Identifiers such as employee ID#, social security number or credit card numbers may also be used.

If the loyalty customer is linked to the participating retailers web site via the loyalty program administrator's e-commerce web site, the loyalty program account
15 number may be passed to the participating retailer's web site electronically. This omits the need to re-enter the loyalty program account number after it has been entered once at the program administrator's web site. The loyalty program account number may also originate from enrollment at any physical store location, the program call center, an affinity card or another participating electronic commerce
20 web site. The account number may also originate from the employee engagement/incentives program. If the customer enters an account number after accessing the participating retailers web site, the number is verified against a check digit routine to validate correct entry and held in temporary storage for use in identifying that customer as a loyalty program participant. The account number may
25 be verified against the central database from any point in the on-line consumer transaction process flow. The customer record stored at the central database is also accessible via the award program account identification number. This information may be used to customize the content and the "look and feel" of the web site for the customer. If the user accessing the web site does not enter an account number, or
30 does not have a loyalty program account number, an option to enroll in the program and obtain an account number is offered to the user.

An additional feature that the system provides in the Internet domain is to allow retailers to separately capture and store information about a user within their web site. This explicit information typically includes customer name and
35 demographics, preferences, billing and shipping addresses, credit card data, user identification number, PIN number, etc. This data may also be used to help personalize the web site. Some of the explicit information captured can be used for alternate identification purposes if the customer does not know the award program

account number. For example, a credit card number can be used instead of the program customer award account number. The system includes a mechanism to identify the customer and the customer account number from the credit card number processed by the system so that a request for retrieval of the customer point balance can be completed. One mechanism that can be used to identify the customer is to link the alternate identification (such as credit card number) to the customer primary account number. When such a link is established, the host system processes the alternate identification sent by the web site server and locates the customer account by way of the link between the customer primary account number and alternate identification. The host system then sends the customer record information associated with the customer primary account number to the participating retailer web site.

Customers may earn points based on the pre-tax non-exempt purchase total for purchases conducted in at participating retailer stores/outlets and on-line through participating retailer web sites. The points that may be earned include "regular" points and "bonus" points. Any points earned, regular or bonus, are added to the customer's current point balance stored in a centralized host system data base in real-time.

In the preferred embodiment of the retail loyalty program, customers earn "regular" points based on the pretax dollar amount of the current sales transaction, less any exempt items. "Bonus" points are extra points that may be earned by the customer on the purchase of specially promoted items on the retailer web site or throughout the retailer outlet. Bonus points typically have a pre-set value defined on the item stored in the item master file. In the Internet domain, the master file is stored on the web site server. In the physical domain, the master file is stored within the in-store controller. For example, if a specific manufacturer of mobile phone cigarette lighter adapters for use with a specific mobile phone has seventy five bonus points attached to it in the master file, a customer will be awarded seventy five points upon purchase of the item. Bonus points may also be awarded in a variable pricing scheme. One example of a variable points award pricing scheme is in the context of items that have variable prices based on the amount purchased or weight, such as fruits, candies, vegetables and meats which may award 50 points for each pound of an item purchased. "Bonus" points may be sponsored by the participating retailer, manufacturer or the program coordinator. The amount of "regular" points that may be earned on a sales transaction is dependent on the dollar amount of the transaction, whereby the calculation of "regular" points is skewed on a sliding scale to favor customers making purchases that total a larger dollar amount. An example of the manner in which regular points are awarded is shown below in Table 1. Not

all consumer products are eligible for point accumulation. For example, exempt items which in some jurisdictions may be items such as tobacco and alcohol do not generate points when purchased.

As shown in Table 1 below, in one embodiment, the system is configured so that it has two "breakpoints" for point calculations. A breakpoint is the minimum purchase amount required to begin earning points. The first breakpoint in the embodiment illustrated is ten dollars (\$10). The second breakpoint is twenty five dollars (\$25). Twenty five dollars (\$25) is an amount just above the current average transaction amount which triggers a higher point issuance rate. All cent amounts are truncated when calculating points. Although transactions less than the ten dollar (\$10.00) minimum are not eligible for regular points, bonus points are awarded for any bonus items purchased even if the transaction amount is less than ten dollars (\$10.00). At any given time, the average store may feature several hundred bonus items. It will be appreciated by those skilled in the art that the number of points, the various break points and the bonus items are representative of one preferred embodiment by a system implementing the principles of the present invention. Other point amounts, dollar amounts and products might be used and should not be construed as limitations of the present invention.

TABLE 1

Example

Points are calculated based on the following criteria:

Minimum purchase	\$10
First break point	5 points per dollar \geq \$10
Second break point	10 points per dollar \geq \$25

Purchase Amount	First Break Points Awarded	Second Break Points Awarded	Total Regular Points Awarded
\$5.00	0	0	0
\$10.00	5 points	0	5 points
\$15.21	6 x 5 points	0	30 points
\$25.00	15 x 5 points	1 x 10 points	85 points
\$30.99	15 x 5 points	6 x 10 points	135 points

The example shown above in Table 1 illustrates the manner in which points are accumulated in one embodiment. In the above example, the amount of the customer's purchase must be at least ten dollars (\$10) in order for a customer to earn any regular points. If the purchase price of all items purchased is greater than or

equal to ten dollars (\$10), the customer will earn five points per dollar amount purchased up to, but not including the second break point at twenty five dollars (\$25). Once the total purchase value reaches twenty five dollars (\$25), in addition to the five points being earned for each dollar between \$10 and \$25, the customer earns
5 ten points for each dollar beginning with the twenty fifth dollars (\$25) .

As shown in Table 1, if the purchase amount is equal to five dollars (\$5.00), no points are awarded. If the purchase amount is at least equal to ten dollars (\$10.00), five points are awarded. No points are awarded for purchases that are less than ten dollars. If the purchase amount equals fifteen dollars and twenty one cents
10 (\$15.21), thirty (30) points are awarded: five points are awarded for the first ten dollars (\$10) and five points for each dollar above ten dollars (\$10) for a total of 30 points. No points are awarded for the twenty one cents because all cent amounts are truncated when calculating points. If the purchase amount is equal to thirty dollars and ninety nine cents (\$30.99) , one hundred thirty five (135) points are awarded.
15 Five points are awarded for the first ten dollars (\$10) and for each dollar above ten dollars (\$10) for a total of seventy five points. The seventy five points are characterized as first break points. Because the total purchase amount is greater than twenty five dollars (\$25) the customer earns second break points which are ten points for the first twenty five dollars (\$25) and for each dollar above twenty five
20 dollars (\$25) for a total of 60 points. No points are awarded for the ninety nine cents. The total points earned for a purchase that totals thirty dollars and ninety-nine cents (\$30.99) as shown above in table 1, is one hundred thirty five points (135) by virtue of combining the first and second chance break points.

Customers may redeem the points earned when purchasing a redeemable
25 item in a number of ways, including gift certificates and/or catalog items at the retailer service desk, or at the time of such purchases for both on-line and in-store purchases. On-line redemptions occur through a participating retailer's interactive web site and in-store redemptions occur through a point-of-sale device. However, in some embodiments of the system, a customer may not be allowed to redeem points
30 earned on a redeemable item until certain information has been input into the system. For example, a retailer may want demographic information input into the customer record of each customer prior to allowing each customer to redeem points in the program. The retailer could implement this requirement by placing a block on each customer's redemption of points until the demographic information has been
35 input into the customer record. In the physical domain, a customer would be directed to the retailer service desk so that the customer profile data required could be input and stored in the customer record at the host system. In the Internet domain, the web site server queries the customer for the customer profile

information. In one embodiment, entry of the requisite profile data is used as a prerequisite to the customer using the account. In this embodiment, upon entry of the requisite consumer profile data, the web site server analyzes the consumer transaction point data to determine if the data representative of the consumer transaction point balance is greater than or equal to a cash credit point balance. In other embodiments, the web site server analyzes the consumer transaction point data after the account has been established and prior to entry of the requisite profile data. Where the consumer transaction point balance is greater than or equal to the cash credit point balance, the consumer is provided with an option to immediately reduce the price of a redeemable transaction item by a specified amount.

The redemption of points at the service desk for catalog items, certificates, and certificates for travel-related rewards that may be redeemed at a variety of point levels, are validated against the customer account at the centralized host system database, and the customer's point balance reflected in the account is debited in real-time upon redemption of points for certificates or catalog items.

The redemption of points during conclusion of on-line purchases or at check-out for purchases occurring in a retail store, in one embodiment, occurs against all items purchased. In this embodiment points are redeemed against the overall purchase price of a customer's transaction. Redemption of points reduces the cost of all items purchased during an online visit or at the end of the check-out process for purchases occurring in a retail store. In another embodiment, the redemption of points during conclusion of on-line purchases or at check-out for purchases occurring in a retail store may only occur for items that are specifically designated as redeemable. Items are designated as redeemable by the retailer. A customer who purchases an item designated as redeemable will be notified of the item's eligibility for redemption by the retailer. In some embodiments, depending upon capabilities of the web site server and point-of-sale systems, the retailer system may notify the customer of the item's eligibility for redemption after the item has been input into the retailer system as one being purchased. If the customer decides to redeem the item eligible for redemption, points will be debited from the customer's account point balance and the customer will receive a reduction in the price of the item being purchased immediately. The system also includes the ability to reflect additional reductions in the price of items purchased by customers participating in the loyalty program. Such reductions are determined by the individual participating retailers. For example, all customers that enter their account numbers into the retailer system during transactions can be given cents off discounts of any amount for a transaction item identified by the retailer. This additional reduction in price can be given

separately or in combination with the price reduction that is provided by the redemption of points on selected redeemable items.

5 An example of the additional reduction in price utilized in combination with a standard point redemption can be visualized on a redeemable item priced at two dollars (\$2.00). If the retailer desires to give away the redeemable item at no cost to the consumer, the retailer may assign an additional reduction amount of eighty cents to the redeemable item. When a customer presents the award account number card along with the purchase of the item, they would get an eighty cent discount and if they choose to redeem the item, they could exchange 750 points for a reduction of 10 \$1.20 and get the item for free. In this scenario, the additional discount is not dependent upon whether the customer redeems points for a reduction in price. Any customer that participates in the program and enters an account number into the retailer system during the purchase of products or services would get the reduction in price. It is also contemplated that the additional discount could be dependent on 15 redemption of points. Wherein, the additional reduction in price of eighty cents will not occur unless the customer elects to redeem points for an initial reduction in price.

In the physical domain, during customer check-out at the point-of-sale device, the system prints on the sales receipt bonus item descriptions and the 20 corresponding bonus points earned for all bonus items purchased during the customer's visit to the retailer. Redemptions taken by the customer at the point-of-sale are also printed on the receipt. When the customer completes all transactions, the system calculates and prints on the customer receipt the total points earned for those transactions and the new account point balance which reflects all points earned 25 and redeemed during the present visit to the retailer. The system also transmits a message carrying the total points earned in the transaction by point category and the total points redeemed in the current transaction to the centralized host system database at the completion of a transaction so that the customer account can be updated. At the retailer's option, the system allows for the retailer to create a 30 transaction log file that is configured to capture and upload information about customer transactions at various levels of detail for data analysis. The transaction log file is generated at both types of retailer systems for transactions occurring on-line and in-store.

35 The employee engagement/incentives program integrated within the combined program may encompass multiple functions. First is the ability to issue congratulatory certificates and real-time point rewards to employees in recognition of positive behavior and achievement of goals or events. In order to capture and measure these behaviors, the program and system includes an interactive application

for peers, supervisors and trainers to enter data pertaining to an employee profile. The interactive application validates that the desired behavior or goal has been reached. The behaviors may include high performance, completion of online or offline training courses, completion of a specific work goal, employee referrals, exemplary attendance, or a special effort expended to solve a problem or acquire a new client. Events such as a service anniversary may also trigger the issuance of rewards. Upon confirmation of the engagement event or behavior, the employee engagement/incentives application will format and transmit a point issuance transaction to the online point server hosted by the program administrator, and the account will be credited in real-time. The online point server will return to the employee incentives program host the new balance of the individual's account, which may reflect transactions conducted in the other retail loyalty domains. In the preferred embodiment, the employee incentives system may also generate an email to the employee and other individuals as desired, with an electronic copy of the recognition certificate suitable for printing, along with confirmation of the number of points earned and the new point balance. The preferred embodiment may also trigger an email to the employee's supervisor or the human resources representative apprising them of the recognition if the recognition was submitted from a peer or another co-worker. Another feature of the preferred embodiment allows the employee being recognized to receive an entry in a sweepstakes for a large reward or prize to be awarded at selected intervals.

Another example of an employee engagement event that may be designated as a trigger for the issuance of recognition and point awards to an employee is the employee's service anniversary. The employee service anniversary feature is a batch software routine that may scan the employee database at certain scheduled intervals and extract a list of the records of any employees who appear to have surpassed a service anniversary, such as 1 year, 5 years, 10 years, etc. This list is then reviewed by the human resource representative responsible for the group under review. Under some circumstances, the human resource representative may need to adjust the anniversary dates. For example, if the employee has been on a leave of absence that it not considered as service time, the service anniversary is extended to the appropriate date reflecting the leave of absence. The human resources representative user also has the ability to approve or not approve the issuance of the reward for each employee on the list. Once the review and adjustment of the list is complete, the user submits the batch, which in turn triggers email recognition to the employee with a link to a rewards page, and a real-time point issuance transaction to the online point server for each employee on the list for the appropriate number of award points to be issued for that particular event. The points posted to the employee's central

account are accessible to all systems in any of the domains having access to the online point server. The employee engagement/incentives system could also format and send email to each of the employees being recognized for a service anniversary, with an electronic certificate and a notice of the number of points posted to their
5 account in recognition of their achievement.

Another major function of the employee incentives program within the combined program is the ability to redeem the points earned in either domain for rewards displayed on the employee incentives program site's redemption page(s). The redemption page(s) is similar to an e-commerce shopping site - a catalog of
10 items available for redemption is displayed, including the number of points required to redeem each item. A plurality of methods for product searches is offered - the employee may search by category, by item, or by keyword. If the employee chooses to initiate a search, search criteria is entered and transmitted to the web server and the results of the search are returned to the client workstation. The employee has the
15 option of selecting one of the products from the list of products located to view the product details.

Upon completion of shopping, the user elects to finalize the purchase and engages a finalization of purchase routine. The account point balance available to the employee may be validated in a number of ways. The first method involves a
20 two-phased transaction. In the first phase, the balance may be retrieved upon entry to the finalization routine and stored in local memory. The finalization routine then calculates and displays the total number of points required for redemption. The employee incentives web application then compares the total number of points required against the account balance previously stored in memory. If the account
25 point balance is less than the amount required to complete the transaction, an error message is displayed, and the routine prompts the employee to either remove items from the shopping cart to reduce the point amount required for redemption, or to exit the redemption entirely. If the account point balance is greater than or equal to the number of points required to redeem, the second phase of the transaction is initiated and a point debit transaction is transmitted electronically in real-time to the online
30 point server at the program administrator host site, and the employee account balance is reduced by the corresponding number of points. The web application displays the new point balance to the employee. A second method for validating the account balance and debiting the account balance utilizes a single-phased transaction approach. A balance inquiry is not utilized. When the number of points required for
35 redemption has been calculated, a point debit authorization request is sent electronically, in real-time from the employee incentives web site to the online point server. The web site must wait for the response from the online point server. In this

method, the online point server performs the comparison of the account balance to the point redemption request. If the account balance is greater than or equal to the number of points required to purchase the items, an approval message is returned to the web server and displayed by the client device and along with the new account point balance. The incentives web application captures the product order information and transmits it to the order fulfillment entity, either an internal or external system. The redemption transaction is concluded. The employee incentives web server, in conjunction with the order fulfillment system, provides an interface for the employee to view the fulfillment status of the order. The order fulfillment system manages the fulfillment process throughout its lifecycle.

A link to the program administrator's e-commerce site offers additional rewards eligible for redemption by the employee. Additional links to e-commerce sites participating in the loyalty program may also be displayed on the engagement program redemption page, thus driving customer traffic to those sites. The employee engagement/incentives program may be extended to the in-store retail domain.

A third major function of the employee incentives interactive site is the ability to offer employee self services, such as the ability to update address and demographics information, supervisor name, benefits information and requests. This information is stored in a database accessible by the incentives program application, and security protected such that an employee must enter an identifier and password to access the information.

A fourth major function of the employee incentives application is the ability of a supervisor or administrator to create templates for recognition or award certificates in electronic form. A variety of templates may be created depending on the behavior being recognized and the originator of the recognition. For example, a template may be created for a peer-to-peer recognition, while other templates may be created for a supervisor recognitions, completion of training, employee referrals, etc. These templates are stored on the employee engagement/incentives program database and accessible by those individuals desiring to issue a reward recognition. Supervisor and administrative functions also encompass access to reports detailing the recognitions sent and received by individuals and by groups.

Employee Engagement and Incentive Award System Overview

The interactive employee engagement and incentive web site server provides an employee engagement award system networked to the central host incentive award system, enabling that same consumer to earn and accumulate points in his or her role as an employee. An important component of the employee engagement

program is the concept of "employee self-service" as related to the capture and maintenance of employee data. A challenging aspect of employee engagement programs is the timely acquisition of employee data such as home address, email address, phone numbers, supervisor, benefit options selected, payroll information, etc. Typically this information may reside on different databases with different database keys, in different departments within an organization and possibly in different geographical locations, possibly lacking linkage between these data stores. More and more employees today are both capable and willing to maintain their profiles directly via a realtime "self-service" model enabled by Internet technologies. The "self-service" enrollment model for employee engagement programs is less costly for the organization implementing the program, engages the employee directly, and provides more accurate employee data. The trend in today's workplace are (1) more employees have online access, (2) more employees work from home with access to the organization's central systems, (3) more employees work on a contractual basis, and (4) more employees willing to "self-service" their profile information via Internet connections. This concept should be directly extensible to maintaining their employee profile via the Internet.

Given that an employee is enrolled in the engagement/incentive program, point-based awards are issued by the employer in recognition of goals achieved, certain events and/or for behavior exhibited by the employee which provides benefit to the employer. Employee engagement/incentive programs utilizing point-based awards may include any or all of the following functional components: (1) Peer-to-peer recognition, (2) Manager-to-employee recognition, (3) Employee referral programs, (4) Service anniversary rewards, (5) Training recognition, (6) Online peer and supervisor performance reviews, (7) Suggestion program, (8) Travel "best-practices" recognition, (9) Employee discounts, (10) Employee Surveys and (11) Job Certification testing. Note that an organization may present a customized set of ERM services to the participant based on criteria such as the participant's profile, department, operating group, geography, etc. For example, employees within one department of an organization may have access to peer-to-peer recognition, while employees of another department may not have access to that module.

In the retail domain, the participating retailer systems include at least one in-store system, which includes point-of-sale systems, and at least one on-line interactive web site that offers goods and/or services to consumers. The business organizations participating in affiliated employee engagement/incentives programs provide systems including at least an interactive web site accessible internally via workstations connected by the company's local area network or intra-network, or externally via any device with Internet access and browser functionality.

The points earned are transmitted in real-time to the host processor and added to points previously earned that are stored in the centralized data storage of the host system. In either the consumer loyalty domain or the employee engagement/incentives domain, the updated or previous point balance may be used to immediately reduce the price of select items purchased by a consumer. The point balance (or a portion of the point balance) may also be redeemed for merchandise offered as rewards on the employee incentives/engagement program interactive web page. The system spans both the physical and Internet domains to provide retailers that participate in a loyalty award program with the ability to augment their physical retail outlets with web sites, thereby providing the competitive advantage of reaching additional customers. The system further spans the Internet domain for companies offering an employee incentives program, thus adding value to both the consumer loyalty and employee incentives program domain through a common point rewards currency.

The system which implements principles of the present invention is comprised of (1) participating retailer systems, and (2) employee engagement systems hosted by participating business organizations, both of which are networked to (3) an incentive award program coordinator host system. The participating retailer systems include at least one in-store system and at least one on-line interactive web site. The in-store system has a local processor, local data storage electrically coupled to the local processor, data input means electrically coupled to the local processor for receiving a consumer account number, and a local communicator electrically coupled to the local processor for transmitting requests for consumer account data. The on-line interactive web site has a web server processor, web server data storage electrically coupled to the web server processor, data input electrically coupled to the web server processor, and web server communicator electrically coupled to said web server processor for transmitting requests for consumer account data. The employee engagement/incentives program system includes an online interactive web site with a web server processor, web server data storage electrically coupled to the web server processor, data input electrically coupled to the web server processor, and web server communicator electrically coupled to said web server processor for transmitting requests for employee account data. The system also consists of employee and supervisor workstations on the organization's private network with connectivity to the interactive web site. The employee incentives program system also provides for connectivity to the interactive web site from Internet access devices, such as personal computers with browsers, connecting via the public Internet. This web site system also includes an email system with capability to send email to devices

within the company Intranet or to devices outside the company Intranet with access to Internet mail servers. The employee incentives web site may also include access to an order fulfillment system, either internal or external to the company domain which provides order management capability for redemption rewards offered by the
5 program.

The program administrator host system has an on-line point server that functions as a host processor, a loyalty program e-commerce web server, a host processor web server, a host database electrically coupled to the host processor and a host communicator electrically coupled to the on-line point server for receiving
10 requests for the consumer account data from the participating retailer systems. The host database includes a plurality of consumer records and merchant records, wherein each consumer record includes at least the consumer award account point total for the participating consumer. The host communicator, which includes a web server gateway and the program administrator web server allows for access to the
15 on-line point server via the Internet, transmits the consumer account data to either of the participating retailer systems which directs the consumer account data transmitted to a display and to data storage. The participating retailer system processes each consumer transaction during the consumer's visit to the retailer outlet or a retailer's web site to determine whether points are to be awarded. The
20 participating retailer system immediately updates the total number of transaction points stored in the retailer web site server data storage or local data storage by adding any points awarded to the customer during their visit to the retailer outlet or the retailer's web site. Within the retail domain, the participating retailer system queries the data representing the updated total number of transaction points
25 following data entry of redeemable items into the system to determine whether the total number of points earned by the consumer is high enough to allow for an immediate price reduction on a redeemable item. The system allows for immediate reduction of said purchase price of said redeemable item purchased and an immediate reduction of said updated point balance when points are redeemed to
30 reduce said purchase price of said redeemable item purchased. The reduced updated point balance, or if no points are redeemed, the updated point balance, is immediately transmitted and stored in the host system database to replace the previous transaction point total. The new point balance being immediately available for use for any subsequent on-line or in-store transactions.

35 Within the employee engagement/incentives program domain, the interactive web site processes requests from an employee's peers or supervisor(s) for award certificates and point currency awards. These requests for recognition certificates may originate from any one of the engagement program components, e.g. peer or

manager recognition, completion of training programs, submission of suggestions, etc. The requests may also be generated automatically by the system based on anniversary dates or other criteria. Regardless of the source of the recognition request, point issuance awards generated by the incentives program web server are credited to the individual's account at the overall program host system database. The updated point balance is immediately available for redemption in any of the three domains: in-store retail, Internet e-commerce, or employee incentives web site (Internet or Internet).

10 Detailed Functional Description

FIG. 1, shows a diagram of an embodiment of the computer implemented consumer transaction point accumulation system. The system includes retailer systems comprised of an in-store system 10 in communication with a retailer host 30 and a merchant web site server 50 in communication with a consumer Internet access device 60. The system also includes a program coordinator host system 40. The in-store system 10 is comprised of a general retailer point-of-sale device 12 that includes a magnetic card reader and/or bar code scanner. It has on-line connectivity to both the program coordinator host system 40 and the retailer host system 30. The point of sale device 12 is electrically coupled to an in-store controller 14 that is electrically coupled to an in-store system communicator 18. In other embodiments, the system does not include an in-store system communicator 18 and the in-store system controller 14 performs the function of transmitting and receiving communications from the program coordinator host system 40. The program coordinator host system 40 is comprised of an on-line point server 42, a central database host system 44, a loyalty program e-commerce web server 46 and a web server gateway 48. The in-store system 10 may also include a networked workstation 16 that is utilized at the retailer service desk. The in-store system communicator 18 and the service desk work station 16 routes the transactions of the in-store system to and from the program administrator host system 40 via a communication network. The transactions being routed between the in-store system 10 and the host system 40 occur in real-time.

The ERM system 70 consists of a web application server 72 coupled to a employee database 76, accessible by PC based workstations with browser software, or by any device enabled to access the Internet such as a PDA, Web TV, etc. These devices may be local to the ERM web server 72 and connected via a local area network 74, remote to the ERM web server with access via an Extranet connection 54, 62, or remote to the ERM server with access via the public Internet 58, 64.

The in-store system's retailer host system 30 is electrically coupled to the in-store system controller 14. The retailer host system 30 facilitates centralized setup of program data related to bonus and point-of-sale redeemable items. The retailer host system 30 transmits the set-up details for bonus and point-of-sale redemption items to the point of sale devices at each retailer outlet through the in-store system controller 14. Although the majority of the setup data is received in batch from the retailer host system 30, which may be off-site, it may be necessary for store personnel to correct and/or modify set-up details downloaded from the host. A mechanism to read and change item level point parameters is thus a requirement at retailer level. Such changes are usually performed by accessing the in-store system controller 14 database. The retailer host system 30 also provides the retailer with the ability to batch upload customer activity shopping data for analysis.

In the present embodiment, the merchant web site server 50 has a web server processor, web server data storage electrically coupled to the web server processor, data input electrically coupled to the web server processor for receiving data transmissions from the consumer Internet access device 60. The merchant web site server 50 also includes a web server communicator that controls communications over the Internet between the web server and the consumer Internet device 60 and communications over the Internet between the web server and the program coordinator host system 40. Additionally, the web server communicator may offer communication to the retailer host system 30. It is to be understood that the merchant web site server disclosed in the present embodiment may have alternative configurations in other embodiments. The configuration of the merchant web site server 50 disclosed in the present invention is not intended to limit the myriad of different configurations the merchant web site server 50 may be implemented with.

The service desk work station 16 comprises a personal computer running a software application that allows a retailer to access the program coordinator host system 40. The retailer may access the application controlling the system and perform a number of functions depending on the levels of security attached to the function and the retailer employee's security clearance level. The functions available for access from the service desk work station 16 include: balance inquiry, transfer points, point balance adjustments, point refund, certificate issuance, merchandise order, add/change alternate identification, cancel/reissue customer card, enter enrollment data, and modify enrollment data. The service desk workstation 16 also transmits information regarding new customer enrollment changes to the central database host system 44. Alternatively, the service desk work station 16 could access a central database host system via the Internet or an Intranet. Similarly, a retailer may access the application controlling the system via the Internet through

use of a consumer Internet access device 60. That connection may be achieved through the loyalty program e-commerce web server 46 or the program administrator host system web server gateway 48. If the application controlling the system is accessed, the retailer may perform a number of functions depending on the level of security attached to the function and the retailer employee's security clearance level. The functions available to a retailer accessing the system via the Internet include: balance inquiry, transfer points, point balance adjustments, point refund, merchandise order, add/change alternate identification, cancel customer account, enter enrollment data and modify enrollment data.

The balancing inquiry function provides the customer with a current account balance. The transfer points function allows the retailer to assist customers in consolidating points between two customer accounts. The point balance adjustments function provides retailer personnel with the ability to make corrections to the customer's point balance in the customer's account. The point refund function provides the retailer with a mechanism to recover points issued on merchandise returns.

The certificate issuance function allows the retailer to issue certificates to the program customers to be used at participating retailers. The certificates are printed with pre-assigned serial numbers in specific dollar amounts. When certificates are physically distributed to retailers, the host system 40 logs the serial numbers sent to each store and flags each certificate with a status "D" indicating that the certificate is distributed and eligible for issuance. At the time of issuance, the certificate serial number is entered at the service desk work-station 16 and verified through the on-line point server 42 to determine the status and value of the certificate. In order to be issued, the status flag for the certificate number being issued must be in the "D" state on the on-line point server 42. When the certificate is issued, the customer account is debited by the number of points necessary to purchase the certificate and the status flag for the certificate is changed to "I" on the on-line point server 42 indicating the certificate has been issued. The status flag assists with assuring that the certificates are used only once for face value.

When a certificate is being returned for redemption in exchange for a reduction in the price of a transaction (for example a \$10 certificate for a reduction of \$10 off the price of merchandise), the cashier or customer must input the serial number of the certificate into the participating retailer system 10, 50. Following entry of the serial number, participating retailer system 10, 50, which is electrically coupled to the on-line point server 42, sends a request to the on-line point server 42 to determine whether the certificate presented is an issued and redeemable/valid certificate. The on-line point server 42 validates the certificate by indicating that the

status of the certificate is ("I") issued and outstanding and that the certificate has not been previously redeemed. The retailer may redeem the certificate once an approval message is sent to the participating retailer system by the on-line point server 42.

5 The retailer may then reduce the amount due on a purchase by the face value of the certificate. A certificate that is redeemed has its status in the on-line point server 42 immediately changed to ("R"). The redeemed status takes the certificate out of circulation and prevents the certificate from being used again.

The merchandise order function provides the retailer with the ability to assist the customer in redeeming points for catalog items. When the customer seeks to
10 purchase catalog items, the customer account is verified through the on-line point server 42 to insure that the customer has a sufficient point total in order to redeem a specified catalog item. If the customer account has sufficient points, the point total is debited in real-time by the number of points necessary for purchase of the selected catalog item. The add/change alternate identification function allows for substitute
15 identification numbers to be set up and modified. The canceled/reissued customer card function allows a retailer to close an existing customer account and transfer the points and customer information to a new customer account. The enter enrollment data function allows the store to enter demographic information for new program participants into the central data base host system 44. The modify enrollment data
20 function allows the store to change demographic information for participating customers.

The in-store system controller 14 communicates directly with the in-store system point-of-sale devices 12 and transmits data files that define the items for sale at the retailer outlet as being bonus, exempt or redeemable. Bonus item, redemption
25 item and exempt item data is transmitted from the retailer host system 30 to data storage files within the in-store system controller 14 for updating the in-store system controller data files relating to bonus, redemption and other system data. The in-store system controller 14 may also perform end-of-the-day processing at the local level which transmits daily totals to the on-line point server 42 for reconciliation.
30 Upon receiving acknowledgment from the on-line point server 42 that the totals record was successfully received, the system controller 10 may extract customer activity and upload customer files to the central data base host system 44. This function also advances the in-store business date.

The on-line point server 42 serves all requests for point balances, updates and
35 redemptions in both the physical and Internet domains. The on-line point server 42 maintains a customer file that includes a plurality of consumer records for each customer participating in the point-accumulation system program. The customer account file also includes a plurality of merchant records for each of the plurality of

non-competing retail merchants that support the program. Each customer record has the customer account data for each participating customer which includes data fields for storing at least the customer account number, the customer's total accumulated point value and customer profile information. The merchant records include at least

5 transaction activity information.

The on-line point server 42 stores detailed point activity data for a current business day in a transaction log file. The on-line point server 42 also extracts and transfers all relevant data to the central database host system 44 for batch updating on a nightly basis. The on-line point server 42 maintains each transaction log file

10 until the operational database 44 server returns a renewal file to the on-line point server 42 at which point the on-line point server executes a renewal process which updates the on-line customer database and purges the corresponding transaction log file.

The operational database host system 44 also serves as a master data

15 repository to service all non-real-time requirements for data (i.e., help desk, accounting, reporting, etc.) in support of the on-line point server 42, in both the physical and Internet domains. In addition, the operational database host system 44 services all requests from the in-store service desk and the retailer web commerce server to add and modify customer demographic data. On a nightly basis, the

20 operational database host system 44 receives the transaction log file extract file from the on-line point server 42, updates the appropriate tables on the operational database host system 44 and creates a renewal file. The renewal file is transferred to the on-line point server 42 to facilitate synchronization of the two-customer databases within the program coordinator host system 40. The system includes the

25 capability to perform a full file audit to make sure that the two-customer databases are synchronized.

The retailer host system 30 and the merchant web site server 50 is where a majority of the setup data regarding bonus, redeemable and exempt items is entered. In the present embodiment, the retailer host system 30 transmits such setup data to

30 the in-store system controller 14 at each retailer outlet for use during consumer transactions. In another embodiment, the retailer host system 30 transmits such setup data to the merchant web site server 50 for use during consumer transactions. The retailer host system 30 and the merchant web site server 50 perform at least the following item setup functions: exempt item setup, bonus item setup and daily item

35 setup processing. The merchant web site server 50 also performs the function of on-line interactive redemption setup. The retailer host system 30 also performs the functions of in-store redemption item setup. The retailer host system 30 also receives the transactional log files from the in-store system controller 14 and service

desk 16. The retailer host system 30 may also receive transactional log files from the merchant web server 50. Some transactional log files may also be transmitted to the program administrator host system 40.

5 The exempt item setup function defines the items and departments where the program points cannot be awarded. Information regarding exempt items is maintained on the merchant web site server 50 and the retailer host system 30. In the present embodiment, for the in-store system transactions in the retailer outlet, this information has to be downloaded from the host system 30 to the in-store system controller 14 database. In another embodiment, the retailer host system 30
10 transmits information regarding exempt items to the merchant web site server 50 for use during consumer transactions. Although it is not a requirement, in this particular embodiment, bonus item setup processing assigns a positive point value to an item and may also assign a start/stop date that defines the period during which an item maintains bonus status. Bonus item setup processing also identifies the sponsor of the bonus points -- the retailer / merchant, the program coordinator, and
15 manufacturer. This information is maintained on the merchant web site server 50 and the retailer host system 30. Information regarding exempt items is also downloaded to the in-store system controller 14 database for use at each individual retailer outlets. The redemption item setup function assigns a negative point and
20 dollar value to an item and a start/stop date that defines the period during which an item maintains redemption status. In this particular embodiment, the point value for redeeming a redemption item is -750 points. The reduction of the price of the redeemable item is -\$1.20, assuming the item purchased has a price that is greater than or equal to \$1.20. This information is maintained on the merchant web server
25 50 and the retailer host system 30. For the in-store system transactions in the retailer outlet, this information has to be downloaded into the in-store system controller 14 from the retailer host system 30. The retailer host system 30 also performs end-of-day processing which extracts all customer activity from each store by retrieving the transaction log files from each in-store system controller 14 and service desk 16 at
30 each retailer location. These files of daily activity are uploaded to the retailer's host 30 and/or to the central database host system 44. It is to be understood that the loyalty program e-commerce web server 46 may also perform end of the day processing in a manner similar to that of the retailer host system 30. The retailer host system 30 and the loyalty program e-commerce web server 46 also provides for
35 batch communications of collected data to the host system 40.

Processing of transactions that occur in either the physical or Internet domain may be performed in two modes, one-phased or two-phased. Both modes of processing, one-phased and two-phased, occur in the Internet and physical domains

on the in-store system 10 and web site server 50. A one-phased transaction is one in which the in-store system or web site server 50 communicates once with the host system during the customer's transactions. The one-phased communication is the request and authorization for a point update transaction where the opportunity for point redemption is not selected. A two-phased transaction is where there is an automatic balance inquiry at the beginning of the transaction and a point update at the end of the transaction.

Fig. 2 illustrates the numerous functions that can be performed by the system through the on-line interactive web site 200 of a merchant. The enrollment function 202 (further described in Fig. 4) is typically performed through the use of electronic forms on the interactive merchant web site 50, or on the loyalty program e-commerce web server 46. The web site user interface simply presents an electronic form, and prompts the consumer to enter the information requested on the form. Upon completion of the form, or if the consumer information was obtained from existing data, the data is transmitted to the program administrator, and checked against various edit rules for validity. If the data passes the edit checks, the central data base host system creates a new account and assigns a unique account number to that account. In the present embodiment, the creation of the new account may also trigger a card fulfillment process 204 implemented by the program administrator. This process physically extracts and matches a loyalty program card (typically plastic) with the correct account number assigned to the customer. The card is inserted into a mailing piece with other program materials and sent to the customer via the postal service. It is to be understood that the card fulfillment process may occur at any time during or after the enrollment process and may be triggered by a number of different functions or events.

Transactions through the merchant web site on the present invention also provide the program participants with the ability to view their individual loyalty account information through a view account information function 206. Within the view account information function, there are a plurality of optional methods of viewing account information. One method is a "Balance" option. The "Balance" option formats a point balance inquiry transaction and transmits that request to the program administrator host system for processing. The program administrator host system would query the point balance associated with that account and return that information to the customer, via the merchant web site which displays the account balance to the consumer. Another method is the "Account" option which similarly formats a request for consumer loyalty program account information, and transmits the request to the program administrator host system. The on-line point server 42 and the operational database host system 44 within the program administrator host

system 40 processes the information retrieved via the web server gateway 48, which may include the enrollment data, the status of the account, and any other information deemed relevant to the account - lifetime points earned, etc. A further method is the "History" option which queries the program administrator host system and displays
5 at the web site a transaction history for the requesting consumer account, describing recent transactions for the consumer account in summary form. The history description may include transactions conducted via the Internet as well as commerce transacted via the physical domain in retail network of stores at the point-of-sale device or service desk. For each loyalty transaction, the information provided may
10 include the date and time of the transaction, name of the merchant, purchase amount, and points issued and/or redeemed. Another optional method is the menu option called "What's this?", or "About (loyalty program name)." This option, if selected, transfers the user to a page with content describing the features and benefits, terms and conditions, and any other relevant information pertaining to the loyalty program.
15 This could be a page within the merchant's web site, or a link to the loyalty programs e-commerce web server. Program participants are also provided with an option to view the status of their orders by selecting a view order status icon 207.

The primary function of the merchant web site 200, is the product Shopping / Searching function 208. Electronic commerce merchants maintain a master file of
20 products available for purchase, and the electronic commerce application resident on the merchant web site provides an interactive homepage with several options for viewing and searching product information. The interactive homepage may display products alphabetically, by category or manufacturer, or the homepage could offer a search feature allowing the customer to find information based on various criteria,
25 such as price, product manufacturer, product subcategory, SKU #, size, color, keyword, etc. Note that this function could be accessed in various ways from the homepage of the interactive homepage, depending on the business requirements and the merchant's preferences. Regardless of what method the user utilizes to locate a particular product, an option to view a detailed description of the product is typically
30 available 210. If the merchant offers bonus points for purchase of the item, that information would also be displayed in the detailed view of the product. Similarly, if a special discount is available on that product in exchange for the redemption of points, that information may also be displayed, along with event information, such as the effective dates of the special offer.

35 If the consumer visiting an interactive homepage on a merchant web site decides to purchase a product, an electronic "order form" may be displayed to gather the additional details of the order, such as quantity of items, size, color, etc. When the order form is complete, the user interface provides an option, via a visual control,

to move the designated items to a storage area of memory known as the "shopping cart" 212. The "shopping cart" function displays the designated items currently placed in the "shopping cart", along with pricing information for each designated item. Bonus points may also be attached to each designated item placed in the "shopping cart". A running monetary cost subtotal may also be maintained and displayed for each designated item. In one embodiment, an additional function, caused by placing an item in the "shopping cart", is the triggering of an electronic point balance request to the program administrator host system, which in turn retrieves and transmits information representative of the point balance back to the homepage where it is displayed to the consumer on his or her personal computer via the merchant web site. This provides the consumer with information useful in making purchase and redemption decisions. The consumer can determine if a sufficient point balance is available to purchase a particular product outright through redemption of, or if a partial discount in exchange for a point redemption makes the proposed purchase feasible. Note that the point balance inquiry function could be triggered by other events in the shopping process, such as when a category or brand is selected or when a consumer logs onto the merchant web site server 50 or onto the loyalty program e-commerce web server 46. Note that the timing of balance inquiries performed by the balance inquiry function is not critical, as long as it is performed prior to the process invoked to finalize the purchase. Note that this point balance would include any points earned at other participating merchant partners in either the electronic commerce domain, or in the physical store domain. After the item has been moved to the shopping cart 212, the user is normally provided with the options to continue viewing the products available, view the contents of the shopping cart 214 and alter the content of the shopping cart 226. As the user continues to shop, the preferred embodiment displays the beginning point balance and a running summary of the total bonus points and "regular" points accumulated in the current transaction, and the projected new balance if the consumer purchases the items currently in the shopping cart. As the contents of the shopping cart are modified, the point information is updated to reflect those changes 228.

A unique feature provided by the on-line interactive web site of the present invention is the function that provides the merchant homepage manager with the option to alert a consumer visitor of the web site that is not identified as a program participant of the rewards available to him or her should they choose to participate in the loyalty program. The alert could be in the form of a message reflecting the number of points that could be earned on that product or a special discount available only to program participants. Another example might include merchant partner offers available only to members at other participating program merchants. The

merchant partner offers advertised could be other electronic commerce merchants, physical retail merchants, or both.

The shopping cart view of the user interface typically displays a visual control to provide the user with a means of indicating they are ready to place an order and finalize the purchase 216. When the user completes that action, typically by clicking the button presented on the user interface, the web site processor calculates and displays the total monetary amount due, including sales tax due and shipping charges. Prior to adding the shipping charges into the amount due, the customer is prompted to select the method of shipment, and once selected, the shipping charges are displayed and added to the total monetary amount due. Information representative of a summary of total points earned in the order is also displayed. A portion of the user interface displays an additional electronic form that provides the customer with an option to redeem points in exchange for a discount on the order. The redemption of points is not necessarily related to any specific item within the order. It is to be understood that various methods and rules for redeeming points may apply, at the discretion of the program administrator and the merchant. Information representative of the number of points needed to pay for the order in total, may also be available to the user. Also, information representative of a minimum point redemption amount may be specified, along with information representative of the fixed increments of points available for redemption. For example, the merchant may specify a 5000 point minimum redemption and may also specify that points are redeemable in blocks of 5000 points, up to the total amount due for the order. When the customer enters the number of points to redeem into the form, that amount is checked against the point balance previously retrieved. If the point balance was unavailable, the customer is not allowed to redeem points. If the customer has a sufficient point balance to honor the redemption request, a debit to the point account is prepared for transmission to the program administrator host system by the web site processor, and the total amount due is updated to reflect the reduced monetary amount due. If the customer does not have a sufficient point balance to honor the request, the user is informed of that condition and provided the opportunity to redeem a lesser number of points, or to proceed with finalizing the order without a point redemption. At this point, the merchant web site processor prepares and displays a point update message. The point update message informs the user that information representative of point credits, point debits, bonus points, merchant ID number and customer ID number is complete and ready to send to the program administrator host, pending positive approval of the transaction by the payment authorization service.

Once the combination of points and currency has been determined, the merchant web site processor prepares an electronic payment authorization message that includes information representative of the dollar amount due for transmission to the credit or debit authorization service with whom the merchant has a contract for service. The user's credit card information may be extracted from a profile held by the merchant. If such information is extracted, the customer is provided with an opportunity to validate that credit card number, or to enter in a different credit card number. Note that this profile may also include additional billing and shipping information that may be displayed by default on the electronic form, and altered by the user. If a profile for a user is not available, a form is presented to accept input of credit card information, and that information is validated by the merchant's electronic commerce application. The billing and shipping information may also be collected via a form if unavailable via a profile. Once the credit card information, billing and shipping information is complete, a payment authorization request 218 is transmitted electronically to the credit/debit authorization service and validated by that system. The merchant electronic commerce application processes that response, and if the response was positive, proceeds with processing of loyalty point information by way of issuing and/or redeeming points 220, 222 and product ordering 224. If the payment authorization was negative, the user is informed of this condition and provided an opportunity to enter a different credit card number or to exit or postpone the transaction. Note that as part of the finalization process, the merchant also may invoke authentication routines to validate the purchase against shipping and/or billing information.

If the electronic payment authorization process resulted in a positive response, the merchant web site processor transmits the point transaction information to the program administrator host system. The host system will update the customer profile in the central database host system and respond to the merchant web site processor. The merchant web site processor may cause the display of a summary of the point activity to the customer following point balance update, the summary includes information representative of the beginning point balance, regular points earned, bonus points earned, points redeemed and the new point balance. As the consumer account information stored in the central database host system is updated with this information, note that this updated consumer account information is immediately available to all other retailer systems in both the physical and Internet domains for participating merchants having retailer systems networked to the host system. An acknowledgment from the program administrator host system is not necessary for the web site processor to proceed with subsequent processing, and those skilled in the art will recognize that if the connection to the program

administrator host system is unavailable for any reason, the transaction may be temporarily stored in web site server data storage until the connection is available, at which time the point update message may be re-transmitted.

5 To complete the order process, the merchant may also transmit the complete order to the supplier or suppliers, and manage the merchandise fulfillment process throughout the lifecycle of that process. The merchant may also fulfill the order from internal inventory. In the preferred embodiment, the product order 224 is automatically transmitted electronically to the order fulfillment entity, which could be an internal or external system. If the vendor is external, one method of
10 communicating this information in the present embodiment is via a standard EDI (electronic data interchange) process; alternatively, the method of communicating this information may be through batch processing or manually via other methods such as fax, email, or by printing a paper order and mailing it via the postal system. Once these product order processes are complete, the current transaction is complete,
15 and the user may be returned to whatever page within the web site the merchant has programmed the web site processor to return the user to.

Integration of the loyalty program into the on-line interactive web site requires functionality to assign the rules for issuance of points, and a mechanism to assign bonus points to particular items, to particular purchase levels, to combinations
20 of items, and so on 234. A merchant having an on-line interactive web site typically has a system to manage the content of the site 238, promotional offers 236, advertisements and to maintain the item catalog 230 as items are added, changed or deleted 232, and to manage pricing of those items. Assignment of bonus points is integrated into the item and event maintenance process. The point redemption rules
25 are also defined by functionality performed by the web site processor, i.e. the minimum number of points to be redeemed, increments of points which may be redeemed, etc. Bonus points and special point redemption offers may also be grouped into a promotion entity and the active dates of that promotion must also be defined within this application.

30 Referring to FIG. 3, an overview of an embodiment of the computer implemented transaction point accumulation system wherein both the Internet and physical domain sides of the consumer transaction point accumulation system is shown, the physical processing illustrated is in two phased mode. In the physical domain, the point accumulation system's processing begins when a customer at the
35 point-of-sale device for a retailer begins to purchase retailer products or services. At the start of the transaction 300, the retailer outlet cashier enters the customer's account number into the in-store system's point-of-sale device by way of a magnetic stripe card reader, keyboard or any other data input device used in conjunction with

the point-of-sale device 302. Following input of the customer's account number, the in-store system controller 14 requests the customer's current point balance 304 from the host system 40 database 304. The host system 40 processes the request and locates a customer's account record stored within the host system 40 database and
5 sends the account record back to the point-of-sale device 306 through the in-store system controller 14. The customer record that is sent back to the point-of-sale device 12 includes at least the customer's current accumulated point balance. The request for data by the in-store system 10 from the host system 40 and the transmission of customer account data from the host system 40 to the in-store system
10 10 both occur real-time so that the point-of-sale device 12 may save the customer's current accumulated point balance and account number in temporary data storage within the point-of-sale device 12 pending entry of a redeemable item 308. The customer point balance is also temporarily stored in the controller 14 so that points accumulated throughout the customer's transaction may be updated more quickly by
15 updating the point balance being temporarily stored in the controller 14.

Following the capture of the customer's account record, referring to FIG. 3, the cashier enters an item number for an item being purchased by the customer via a scanner or keypad 310, 312 causing the point-of-sale device 12 to communicate with the system controller 14 requesting the controller 14 to look up the item number of
20 the item being purchased on a master item file within the in-store system controller 14 database 314. All items of possible purchase should be stored in the master item file where they are cross referenced with an item number and a status label. The status label for each item stored within the in-store system database is either exempt, redeemable, bonus or no status. First, the system checks to see if the item the
25 customer seeks to purchase has exempt status 316. If the status is exempt, no points can be awarded for the purchase of that particular item 318. The system then returns the point-of-sale device process back to the item entry state 310 so that the retailer may enter the item number of the next item desired to be purchased. If the item the customer seeks to purchase is not referenced as exempt, the point-of-sale device
30 adds the price of the item to the accumulator tracking the eligible total for calculation of "regular" points 320. Next, the system checks to see if the item the customer seeks to purchase has bonus status 322. If the item being purchased has bonus status 324, the system processes the item being purchased as a bonus item and adds bonus points to the customer accumulated point balance total stored in
35 temporary storage of the point of sale device. Next, the system returns the point-of-sale device process back to the item entry state 310 so that the retailer may enter the item number of the next item desired to be purchased.

If the item being purchased by a consumer does not have bonus status, the system checks to see if the item has redeemable status 326. If the item does not have redeemable status, it has no status 328 and the system returns the point-of-sale device process back to the item entry state 310 so that the retailer may enter the item number of the next item desired to be purchased. If the item has redeemable status, the system may notify the retailer of such status and prompt the cashier to ask the customer if he/she wishes to exchange points for a reduction in the price of the item purchased 330. In this embodiment, the customer may exchange 750 points for a \$1.20 reduction in the price of the redeemable item being purchased. If the consumer declines to exchange points for \$1.20 off the price of the redeemable item being purchased, the system returns the point-of-sale device process back to the item entry state 310 so that the retailer may enter the item number of the next item desired to be purchased. If the customer desires to exchange 750 points for a \$1.20 reduction in the price of the item purchased 332, the cashier enters a unique code into the point-of-sale device corresponding to acceptance by the customer of the point exchange for a reduction in purchase price option. Following acceptance of the point exchange option by the customer, the point of sale device checks the balance of the customer's point total being temporarily stored in the point-of-sale device temporary data storage 334. Specifically, in this particular invention, the system is checking to see if the customer account point total is greater than or equal to 750 points. If the point total is less than 750 points 334, the point-of-sale device displays an error message to the retailer and voids out the 750 point exchange option 338 and the system returns the point-of-sale device process back to the item entry state 310 so that the retailer may enter the item number of the next item desired to be purchased. If the customer account point balance is greater than or equal to 750 points, the point-of-sale device checks the in-store system controller data base to determine if the price of the item being purchased is greater than or equal to \$1.20 336. If the price of the item being purchased is less than \$1.20, an error is displayed at the point-of-sale device to the retailer and the system returns the point-of-sale device process back to the item entry state 310 so that the clerk may enter the item number of the next item desired to be purchased 338. If the price of the item being purchased is greater than or equal to \$1.20 340, the in-store system controller returns an item description to the point-of-sale device and debits the customer accumulated point balance temporarily stored in the point-of-sale device temporary storage by 750 points 340. The point-of-sale device prints a description of the item redeemed and/or the point amount debited from the consumer's accumulated account balance on the customer receipt 342. The in-store system controller also captures redemption and bonus data in a log file 344. Then, the system returns the point-of-

sale device process back to the item entry state 310 so that the clerk may enter the item number of the next item desired to be purchased.

If all customer transaction items have been purchased, the retailer may press a total key 310, 312 in order to indicate that the customer's transaction is complete.

- 5 Once the customer's transactions have been completed, the controller calculates the net points earned by the customer during the current sales visit 346. Next, the retailer determines whether the order is ready to tender 348. If the order is not ready to tender, the system allows for the return of the point-of-sale device process to the item entry state 310 so that the retailer may enter data necessary to tender the order.
- 10 If the order is ready to tender, the retailer tenders the order 350 and the point-of-sale device calculates the total net points earned during the current sale's visit and the new account balance of points accumulated 352. The point of sale device also sends an update message to the host that includes the customer's points earned in the current transaction 352. The system host retrieves the point update transaction and
- 15 returns an acknowledgment of receipt of the update message to the in-store system controller and point-of-sale device 354. In either the one-phased or two-phased mode, following receipt of a point update response message from the host system the point-of-sale device prints a receipt for the customer that includes the beginning point balance, the total points earned during the sales visit, the total points
- 20 exchanged for price reductions during the sales visit and the new account point balance 356, which completes the transaction for that customer 358.

- Referring to FIG. 4, the enrollment process at the on-line interactive web site is disclosed. Generally, the enrollment function is typically performed through the use of electronic forms on the interactive web site of the merchant, or on the loyalty
- 25 program e-commerce web site of the program administrator host system. The customer accesses the electronic forms following selecting a display at the merchant web site or at the web site of the program administrator which indicates that the consumer would like to open a loyalty award account. Next, merchant web site user interface simply presents an electronic form, and prompts the consumer to enter the
- 30 information requested on the form. Upon completion of the form, or if the consumer information was obtained from existing data, the data is transmitted to the program administrator host system, and checked against various edit rules for validity. If the data passes the edit checks, the program administrator host system creates a new account and assigns a unique account number to that account.

- 35 The enrollment function is initiated at the on-line interactive web site of the merchant or on the loyalty program e-commerce web site of the program administrator by selecting an icon identifying the enrollment option 400. Next, the server for the on-line interactive web site of the merchant or of the loyalty program

e-commerce web site of the program administrator determines whether there is customer data available 402. If enrollment has been initiated through the on-line interactive web site of the merchant, and the customer has already provided name and demographic data to the electronic commerce merchant for billing and/or shipping purposes, that information can be retrieved from an existing merchant customer data base 413 and used to populate the fields of an electronic form automatically 404. If the customer has not previously provided name and demographic data to the electronic commerce merchant or if enrollment has been initiated through the loyalty program e-commerce web site of the program administrator, there is no customer data available for retrieval. The customer must enter the data in electronic forms provided by the on-line interactive web site of the merchant or by the web site of the program administrator 411. The data entered in the electronic forms must then be saved 412 and stored in a merchant customer database 413. Following automatic or manual completion of the electronic enrollment form, the enrollment data entered is sent to the program administrator host database 406, where the information is processed for errors 408. If there are enrollment errors 410, the customer is presented the electronic enrollment form 412 for additional data entry. If there were no enrollment errors, a new program account number is retrieved 414 from an account number database 418, thereby creating a new loyalty program account for a customer 420. The new account is maintained and stored in the customer database at the central host database system 424.

Creation of the new account triggers a card fulfillment process automatically implemented by the program administrator host system. This process physically extracts and matches a loyalty program card (typically plastic) 426 with the correct account number assigned to the customer. The card is inserted into a mailing piece with other program materials 428 and sent to the customer via the postal service 430. Successful creation of a new loyalty account also triggers an electronic response (email) to the customer confirming the information received and the account number 422. Next, the merchant web site processor or the program administrator loyalty program e-commerce web server processor returns the consumer to the calling homepage 432.

Fig. 5 illustrates an overview of the process flow of the product shopping, browsing and searching option functions provide for via a merchant on-line interactive web site. From the merchant web site homepage 500 a consumer is provided with the option of selecting a product by a plurality of methods 502, including selecting product categories, searching for products by keyword search or item number search. Selecting products by use of the select product category function 504 displays a list of products within a particular category and provides for

the option of selecting one of the products from the list displayed to view the details 508 of the particular product. This function also allows for the consumer to perform an additional search for products by keyword or item number.

If the consumer chooses to search the interactive merchant web site by
5 keyword or item number, the appropriate search criteria must be entered into the appropriate search field and transmitted. The merchant web site processor searches an item master file for products satisfying the search criteria 512. If there is a match found for the search criteria 514, the merchant web site processor causes the information located to be displayed on the consumer's Internet access device 514.
10 The consumer has the option of selecting one of the products from the list of products located to view the product details 516. In addition to the items located, the consumer also has the ability to perform an additional search for products by keyword or item number.

If an item from the list of products that are displayed from a search by
15 keyword or category is selected 518, the interactive web site displays a detailed description of the item, including bonus points that may be awarded upon purchase of the item to consumers participating in the loyalty program. If the consumer decides to purchase a product, the product will need to be moved into temporary data storage referred to as the "shopping cart" 520. Before items desired to be purchased
20 can be moved into the "shopping cart", an electronic "order form" may be displayed to gather the additional details of the order, such as quantity of items, size, color, etc. When the electronics order form is complete 524, the user interface provides an option, via a visual control, to move the designated items to the "shopping cart" 528. The "shopping cart" view displays the items currently placed in the "shopping cart",
25 along with pricing information 530. Bonus points are also attached to each item placed in the "shopping cart" and a running monetary cost subtotal may also maintained and displayed. The action of placing an item in the "shopping cart" may trigger an electronic point balance request to the program administrator host system, which in turn retrieves 522 and transmits the point balance back to the merchant web
30 site where it is displayed to the consumer on his or her Internet access device via the on-line interactive web site 526. Note that the balance inquiry function could be triggered by other events in the shopping process, such as when a category or brand is selected - the timing of the balance inquiry is not critical, as long as it is performed prior to the process being invoked to finalize the purchase. Note that this
35 point balance would include any points earned at other participating partners in either the electronic commerce domain, or in the physical store domain. After the item has been moved to the "shopping cart" 528, the user is normally provided with the option to continue viewing the products available, view the contents of the

"shopping cart" 530 and alter the content of the "shopping cart" 530. As the user continues to shop, the preferred embodiment displays the beginning point balance and a running summary of the total "bonus" points and "regular" points accumulated in the current transaction, and the projected new balance if the consumer purchases the items currently in the "shopping cart" 530. As the contents of the shopping cart are modified, the point information is updated to reflect those changes.

Upon completion of shopping 532, the user elects to finalize the purchase and engages a finalization of purchase routine 534 that calculates and displays the total monetary amount due. The total amount due may or may not include sales tax due and shipping charges. A summary of total points earned in the order is also displayed. In one embodiment of the finalization of purchase routine, illustrated in detail in Fig. 6, it begins within the shopping cart function 600. First, the user is provided with an opportunity to view the items identified for the shopping cart and the subtotal of the amount due 602. Next, the customer selects the shipping method and the shipping charges are calculated and displayed. If the customer indicates that they want to continue finalizing the order and make payment 604, the system queries the user whether they would like to redeem points in exchange for a discount on the purchase 606. If the customer indicates that they are not ready to finalize the order and make payment, the user is again provided with an opportunity to view the items identified for the shopping cart and the subtotal of the amount due 602. If the customer opts to redeem points in exchange for a discount 606, the customer is prompted to enter the number of points to be redeemed and to initiate the redemption process 608. If the customer point balance is less than the number of points requested to be redeemed 610, an error message is displayed to the customer and the routine reinitiates the query to the customer as to whether they would like to redeem points in exchange for a discount on the purchase 606. If the point balance is greater than or equal to the number of points requested to be redeemed 610, the system prepares a debit command to the host database system to debit the customer point balance by the amount of points indicated and reduce the total amount due by the appropriate amount. Next, the tax, shipping charges, total amount due, total points earned and redeemed are calculated and displayed 618. Next the system queries its customer profile database 622 to determine if the customer's credit card, billing / shipping address information is available 620. If the customer's credit card and billing / shipping address information is not available, the system requests and accepts the credit card and billing information from the customer 626. If the customer's credit card and billing / shipping address information is available 620, it is retrieved from the customer profile database and validated by the customer 624. At this step in the process, the customer is allowed to make changes to the customer

data retrieved if required. After the credit card, billing / shipping information has been entered 624, 626, a credit payment transaction is initiated and sent to the credit authorization network 628. The customer is also provided with a response from the credit authorization network. If the credit card transaction is not approved 630, the customer is informed that payment authorization failed 632. The customer is then provided with an option to enter another credit card number 632. If the customer does not accept the option to pay with another credit card 634, the contents in the shopping basket are stored temporarily so that the customer may reengage the transaction at a later date and then the transaction is terminated. If the customer enters and alternative credit card number 632 and accepts the option to pay with alternative credit card 634, that new credit card number is displayed along with the other billing and shipping information to the customer so that its accuracy can be validated 624. The system then steps through the same processing steps set forth above following validation of credit card information.

If the credit card transaction is approved 630 the merchant web site processor transmits the updated consumer point transaction, including both the number of points to be debited and points to be credited to the program administrator host system 640. Next, the merchant web site processor automatically transmits the product order electronically to the order fulfillment entity, which could be an internal or external system 542. The merchant web site processor in conjunction with order processing system also manages and monitors the merchandise fulfillment process throughout the lifecycle of that process. The program administrator host system updates the consumer account information with the updated point balance and consumer information and returns and acknowledgment back to the interactive homepage 544. The interactive web site homepage may then display the customer's beginning balance, points earned, points redeemed and the new updated point balance following the transaction 646. The transaction is then concluded 648. At the time the consumer account information stored in the program administrator's host system central database is updated with this information, the points and all other consumer account information is immediately available to all other retailer systems networked to the program administrator host system in both the physical and Internet domains.

Referring to Fig. 7A, an illustration of the process flow for the self-service enrollment and maintenance (ERM) module 700, illustrating the process flow for an employee participating in the employee service incentive/engagement program. Note that the ERM module employee database is updated on a scheduled basis with new employees, employees who have left the company, changes in status, etc. The source of this information could be from a company payroll file or a human

resources database. The self-service process is initiated when the participant accesses the web site home page from a browser with access to the ERM interactive web site 702, either from within the company premises via Intranet or Extranet connection, or via the public Internet. Upon accessing the ERM interactive web site, the user is queried to determine whether they are enrolled in the employee service incentive/engagement program 706. An enrolled participant will enter a user ID and password in the form displayed as part of the ERM site home page to gain access to the site 750. A new employee, or an employee not previously enrolled in the ERM program will be offered access to the site via a visual "button" for "first time users" 708.

When the user interactively notifies the system that it is a first time user by pressing the "first time user" button, a form is presented requesting basic information 710. In the present embodiment, the form includes at least the following fields for inclusion of information, first name, last name and the last 4 digits of the employee's social security number. This information is used to query the ERM employee database to determine if a matching entry is located 712. If a matching entry is located in the ERM employee database 714, the user gains entry to a page on the site displaying an enrollment form. This form is pre-populated with any applicable information from the ERM database 716. This information may include participant's status, such as full time employee versus contract employee, supervisor identity, operating group, title, salary and benefit information, etc. The participant may fill in any information missing from the profile on the form 718 and interactively submits the completed form to the web server. Referring to Fig. 7B, the web server application software validates the information submitted, and checks the information submitted for errors 722 and displays error messages if invalid information was entered and allows the participant to correct any incorrect or missing data 724. When the data has been validated 720 and no errors are found 722, an account number is retrieved 726 from the ERM database 728 and assigned to the participant's account 726. The account number is also displayed to the participant, and the participant may be encouraged to print the number. The account number may be used immediately within the ERM web site, or at any retail entity in the loyalty network affiliated with the employee service incentive/engagement program. The enrollment data is saved 730 in the ERM program employee database 732 and is also forwarded to the program administrator host system 734 where it is store in a participant database 736. A confirmation email with the account number and ERM and or retail loyalty network program features may also be sent to the participant 738. Optionally, the program administrator may issue a card encoded with the account number to participant 740, via an off-line batch mode process

wherein a mailing package having the card and other program materials enclosed 742 is sent to the employee via the postal service mailing process 744. The email message may also inform the customer that they have been enrolled in the employee service incentive/engagement program and that an employee service
5 incentive/engagement program card is being mailed to them that will enable the customer to earn and redeem points in the employment or retail environments.

When the enrolled participant logs in 750, the user ID and password are validated against the ERM program database 752. If the user ID and password are valid, a page with the current participant profile is populated automatically from
10 information stored on the ERM employee database 754. The participant is able to review and modify the information from the ERM module database as necessary (within the rules established by the module) 756 and submit for editing by the web application software 758. If the data is determined to be valid 760, the modifications to the information from the ERM module database are saved to the ERM employee
15 database 762 and forwarded to the program administrator host system 764.

Referring to Figure 8a-8c, an illustration of the peer to peer awards recognition process flow is shown. The peer to peer awards recognition component of an employee engagement program provides participants with the ability to recognize their peers for performance or behaviors. The system is web-enabled in
20 that the software application supporting this functionality resides on a Web Server and is accessible by a computer or other device with browser capabilities, over a company's internal network, or the public Internet. The program participants submitting the employee nominations (nominators) may either be peers of the employee, or the supervisor of the employee. Both the nominator and nominee may
25 instantly earn points and be eligible for sweepstakes prizes in the form of additional points. Both the nominator and nominee must be registered in the employee engagement system database, and must have an account number in order to receive point awards. Nominators that are registered are thereby enrolled in the employee service incentive/engagement program to be eligible to nominate a peer for
30 recognition.

Enrolled participants have access to the web site and may enter nominations on-line. A nomination begins by the user (nominator) logging into the system with their respective user ID and password 780 and selecting the name of a single peer (the nominee) or the names of multiple peers that are to be nominated 782 from the
35 ERM program database 784. If the nominee's profile is present on the database, but the nominee is not enrolled, the nominator may select the employee for a nomination. A non-enrolled employee will not receive points or have a confirmation email sent to his or her supervisor unless the employee has a ERM program account

ID. Also, if the nominee is not enrolled, the system searches the employee data retrieved from the ERM program database 784 to determine if the nominee's e-mail address is available 788. If the Nominee's e-mail address is available, the nominator is given the option to send out a reminder email to the nominee to enroll in the program 790. If the nominee does not have an e-mail address available 788, they may be reminded to enroll in the employee service incentive/engagement program by manual, non-electronic methods, such as first class mail 792 or intercompany mail. The employee information returned from the ERM database 784 and displayed includes the supervisor information for viewing by the nominator. If the nominee is enrolled in the employee service incentive/engagement program, the nominator is required to select a recognition category 796 and enter the textual description of the employee's accomplishment and recognition 798. The list of recognition categories is stored as parameters in the ERM program database. Operating Group administrators have the ability to customize nomination criteria based on the receiver's Operating Group.

Once a nomination has been entered and submitted, a preview screen is displayed and the nominator will be asked to verify the employee nomination information for accuracy 800. If the information being verified is not valid 802, the nominator enters the necessary corrections to the information 804. If the information being verified is valid 802, the employee nomination information is saved 806 in the ERM program database 808. Upon a successful save to the database of the nomination, as Fig. 8B illustrates, the system enters the nominee and/or the nominator into a sweepstakes 809 and determines if the nominee is enrolled in the employee service incentive/engagement program. If the user is enrolled in the employee service incentive/engagement program 810 a points issuance transaction for the nominee's account is sent to the central online point server 812 at the program coordinator host system 814, and the employee's central account will be updated real-time to reflect the points earned for the recognition. If the program coordinator host system updates the employee's central account, the host system automatically transmits a positive acknowledgment back to the ERM system 816. The ERM system then determines whether there are additional point transactions to send to the central online point server at the program coordinator host system 818. If additional point transactions are required as in the case of a team nomination, these additional points issuance transactions are transmitted to the nominees' accounts residing at the central online point server 812. If there are no additional point transactions, point processing is completed 820. If the ERM system does not receive a transmission of positive acknowledgment from the host system 816, the ERM system attempts to resend data reflecting the points earned for the recognition

822 to the central online point server 812 at the program coordinator host system 814, so that the employee's central account will be updated real-time to reflect the points earned for the recognition. Alternatively, the ERM system may queue the transaction for store/forward batch processing at a later time 824.

5 Referring to Fig. 8C, the system sends an email to the employee, nominator and supervisor advising of the recognition and to confirm the number of points posted the nominee's account 826, 828. An electronic copy of the recognition certificate is attached to the email 830, and the nominee may launch a software application from the email screen to view and/or print the recognition paper
10 certificate 834. The certificate includes all nomination information, including the category, the textual information entered by the nominee, and nominator information. Referring to Fig. 8b, if the user is not enrolled in the employee service incentive/engagement program 810, as Fig. 8c illustrates, the system determines whether an employee email address is available 838. If an employee email address
15 is available, the system sends an email to the employee, nominator and program administrator advising of the recognition 840, 842, 844. Note that when the employee is not enrolled in the program, the system sends a confirmation email to the administrator email box rather than to the supervisor. If an employee email address is available the user is advised of the recognition by manual, non-electronic
20 methods, such as first class mail or intercompany mail.

There are three main functions encompassed by the electronic peer-to-peer system: (1) Administrative functions, (2) Send a recognition, and (3) View Recognition(s). The administrative functions of the peer-to-peer program include (1) add participant, (2) update participant profile, (3) review existing certificates, (4)
25 process manual, non-electronic nominations for participants with no access to the system, (5) configure program parameters, and (6) sweepstakes setup winner selection. The Add participant function is essentially the same as that described in the self-service enrollment and profile maintenance, except that the process is performed by a program administrator or human resources representative. A user of
30 this feature will have as a component of the form, a button to designate whether or not an employee is eligible to receive points as part of a recognition. The Update Participant Profile function is also the same as that described above under self-service enrollment and profile maintenance, except that the process is performed by a program administrator or an resources representative. The Certificate Review
35 function is an administrative process that provides the administrator user with the ability to view a list of certificates by date range, nominator name and nominee name, based on parameter input provided by the user. The user specifies the parameters and presses a "submit button" visible on the browser. A list of

certificate awards is displayed. A certificate may be selected from the list, in which case an additional form will display the detailed certificate information.

5 The administrative process for the peer-to-peer recognition certificate review function is illustrated in detail in Fig.9. The administrator logs into the system using their user ID and password 850. Next, the administrator retrieves the query form for awards criteria 852 from the ERM database 854. Next, the administrator selects a subset of certificates 856 from the certificates retrieved from the ERM database certificate table 858. The administrator is then presented with the option of viewing and printing the detail certificate information and read-only format 862 or with a
10 option to add a nomination for non-electronic / paper based nominees 864. The paper based award is then sent to the nominees 866.

Additional forms within the administrative function includes, Non-Electronic Participant Nominations, Program Parameter and Sweepstakes Setup and Winner Selection. The Non-Electronic Participant Nominations form within the
15 administrative function provides the option to add a new nomination for those participants who do not have web browsers and cannot access the engagement program host application. The Program Parameter Configuration form is an awards criteria form that provides a user with the ability to enter the parameters for the program. Included are the nominator points to award, nominee points to award and
20 enrollment points to award. The administrative process for the peer-to-peer recognition awards criteria entry function is illustrated in detail in Fig. 10. The administrator logs into the system using their user ID and password 870. Next, the administrator retrieves the query form for awards criteria entry 872 from the ERM Module database 874. Next, the administrator enters the criteria for awards into the awards criteria entry form 876. The criteria for awards includes, points to award for
25 nominator, nominee, and enrollment into the program. The awards criteria entered into the awards criteria entry form is saved in the ERM database 878, 880.

The Sweepstakes Setup and Winner Selection form is provided to provide the administrative user with the ability to specify the sweepstakes points to award
30 and number of sweepstakes winners to select in the sweepstakes process, along with other rules that may apply to the Sweepstakes. The form also provides the ability to enter a date range for selection of prospective winners. After all the required parameters for the sweepstakes have been entered, the user confirms the configuration and launches the winner selection process on the web server. This
35 process will randomly pick the number of winners designated and display a list on the screen and trigger the transmission of point issuance transactions to the online point server. When a successful response is received from the online point server, emails will be sent to the winners, the database will be updated and a winner's report

created. A form to go back and review any sweepstakes process winners is also provided. The administrative process for the peer-to-peer recognition sweepstakes setup function is illustrated in detail in Fig. 11A. The administrator logs into the system using their user ID and password 884. The administrator then enters the sweepstakes parameters 886, 888, including at least, specifying points to award, rules that may apply to sweepstakes, data range, number of winners. The administrator then views and validates the sweepstakes parameters 890. Next, the administrator submits the parameters and launches the sweepstakes selection process 892, which selects winners and displays the winners selected to the administrator 894. The sweepstakes winners are then saved in data storage 896. Next, the administrator formats point issuance transactions for sweepstakes winners and nominators 898 by retrieving and processing data regarding awards criteria 900 and sweepstakes winners 902. Next, a points issuance transaction for the sweepstakes winners and nominators is sent to the central online point server 904 database at the program coordinator host system 906, and the sweepstakes winners and nominators central account will be updated real-time to reflect the points earned for the recognition. If the program coordinator host system updates the sweepstakes winners and nominators central account, the host system automatically transmits a positive acknowledgment back to the ERM system 908. The ERM system then determines whether there are additional winners of the sweepstakes 910. If there are additional winners 910 of the sweepstakes, the administrator formats point issuance transactions for sweepstakes winners and nominators 898 by retrieving and processing data regarding awards criteria 900 and sweepstakes winners 902. If there are no additional winners 910 of the sweepstakes, the system sends e-mail to the winners of the sweepstakes 912. Sweepstakes winners nominators receive confirmation e-mails 914 and the system creates sweepstakes winners report 916, 918. If the ERM system does not receive a transmission of positive acknowledgment from the host system 908, the ERM system attempts to resend data reflecting the points earned for the recognition 920 to the central online point server 904 at the program coordinator host system 814, so that the sweepstakes winners and nominators central accounts will be updated real-time to reflect the points earned for the recognition. Alternatively, the ERM system may queue the transaction for store/forward batch processing at a later time 922.

A participant enrolled in the employee service incentive/engagement program may access a page displaying all recognition nominations received or sent. By selecting a particular recognition from the list, the participant may view the details of the recognition, including an electronic copy of the certificate.

An additional feature of the ERM program termed Manager's Discretionary Awards allows a manager enrolled in the program to give an award recognition to an enrolled employee. A manager with responsibility for multiple projects or campaigns is designated for each of those projects, and can award any amount of points within that budget. A manager may also award employees who are not direct reports. Similar to the peer-to-peer program, recognition categories may be assigned and custom descriptions may be entered by the manager. Points are awarded real-time and participants are notified via email. A history of awards is maintained by project and budget and is available for viewing by the manager or administrators.

Referring to Fig. 12, the administrative steps involved in the process of setting up program criteria and budget information for a manager recognition module are disclosed. First, the administration team will enter the program criteria within the Campaign Detail screen 924. The program parameters include: Beginning date of program; Ending date of program; Maximum amount an employee may earn within this campaign/program; Whether a selection of an Award Category will be displayed to the manager, and secondly if it is required to be selected for the award to be given; Whether the option of adding a verbatim Award Description will be displayed to the manager, and secondly if it is required to be populated for the award to be given. Next, the administration team will enter the budget information associated to that program in the New Budget screen 926. This includes the Client Budget Description, as well as the expiration date of the budgetary funds. All budgets will have a unique key for the budget, identified as "budget id." A person may have multiple budgets. A budget can only have one budget owner at any given time, however, the budget owner can be changed. For example, if a manager leaves and another manager is hired. The budget will be transferred to the new manager as the budget owner. The budget will have an assigned expiration date. Note that funds may expire at the same time or after the ending date of the program. Next, the administration team will load the budget information into the system through the Budget Load screen 928, which includes a batch file and online entry applications. In the batch file application, the administration team will select which campaign/promotion will be updated and run a load process to automatically load the reporting id, manager id, and budget amount for each individual. Note: If an update of a budget is required, the administration team can update this information manually. In the online entry application, the administration team will have the ability to add the reporting id, manager id, and budget amount manually for a given campaign/promotion rather than using the batch file load process, as described above.

Fig. 13 illustrates the Manager's Discretionary Awards Process. A manager logs on to the ERM application using his unique ERM ID and password 930 and selects the option to enter the Manager's recognition module 931, also referred to as the Manager's Discretionary Awards module. The manager enters the assigned budget ID 932, and access to the budget and to the application is validated. The system then determines whether the manager is authorized to distribute from the budget 934. Only those managers who have been given a budgeted amount to award will have access to the Manager Recognition module and the associated toolkit, also referred to as the "distribution section". If the manager is not authorized to distribute from the budget 935, the manager is prompted to select an authorized budget ID 935 and provided an opportunity to enter another budget ID number 933. If the manager is authorized to distribute from the budget 934, the manager is granted access to the manager recognition module (distribution section) 936. Within the "distribution" section, the manager is able to validate the following attributes: budget to allocate award; current amount available ; original budget amount; amount remaining, as well as the expiration date of the budget 937. Next, the manager is able to select any employee other than themselves for an award recognition 938 and to validate that the employee is enrolled in the ERM program. If the employee's profile is present on the database, but the employee is not enrolled 939, the manager may select the employee for a nomination. A non-enrolled employee will not receive points or have a confirmation email sent to his or her supervisor unless the employee has a ERM program account ID. Also, if the employee is not enrolled, the system searches the employee data retrieved from the ERM program database to determine if the employee's e-mail address is available 940. If the employee's e-mail address is available, the manager is given the option to send out a reminder email to the employee to enroll in the program 941. If the employee does not have an e-mail address available 940, they may be reminded to enroll in the employee service incentive/engagement program by manual, non-electronic methods, such as first class mail or intercompany mail 942. After an employee has been selected for an award, the manager can select an award category, description of the award and amount of the award 945. The manager can also enter a verbatim description of what the person did to earn the award 946. The award category and description are based on parameters required by the client. Next, the manager will have the opportunity to validate the information entered prior to awarding the employee 947. The system also validates that the amount to be awarded to the employee is less than or equal to the remaining budget amount, and that the maximum payout amount for an employee has not been reached 948. Next, the manager validates the remaining budget amount and maximum employee payout information 949. If this information

is not valid, the manager enters corrections to the information 950 and then is provided with another opportunity to validate the information entered prior to awarding the employee. Once the remaining budget amount and maximum employee payout information is validated by the manager 949, points are awarded to the employee via a process very similar to the process described above for the peer-to-peer recognition. First, the ERM database is updated with the recognition information 951. Next, if the user is enrolled in the employee service incentive/engagement program, a points issuance transaction for the employee nominee account is sent to the central online point server 953 at the program coordinator host system 954, and the employee central account will be updated real-time to reflect the points earned for the recognition. If the program coordinator host system updates the employee's central account, the host system automatically transmits a positive acknowledgment back to the ERM system 955. The ERM system then retrieves the project budget from the ERM database and adjusts the project budget in accordance with the points issued to the employee nominee 956.

Next, the system sends an email to the employee and manager 957, 962 advising of the recognition and to confirm the number of points posted to the nominee's account. An electronic copy of the recognition certificate is attached to the email 958, and the employee nominee may launch a software application from the email screen to view and/or print the recognition paper certificate 959. The certificate generated includes all nomination information, including the category, textual information entered by the nominator, and nominee information 960. After the certificate has been created, the process is ended 961. A history section will also be available to the manager for each budget that has been assigned to them. If the ownership of the budget changes from one manager to another during the campaign/program, the new manager will have access to all of the historical information, such as: awarding manager; employee; date of award; award amount; and award category and description, if required and populated. If the ERM system does not receive a transmission of positive acknowledgment from the host system 955, the ERM system attempts to re-send data reflecting the points earned for the recognition 963 to the online point server 963, 964 at the program coordinator host system so that the employee's central account will be updated real-time to reflect the points earned for the recognition. Alternatively, the ERM system may cue the transaction for store/forward batch processing at a later time 964.

The system may also include an applicant referral awards module, wherein the referral module offers a participating employee the opportunity to identify a job applicant and attach a resume for review by an operating group within the company. The referring employee will receive points for submitting the information. If the

applicant is hired within 6 months of the referral submission, the referring employee will be also eligible for a variety of rewards, including points, cash, merchandise, etc.

5 A participating employee who desires to make a referral for a job opening will log on to the ERM system and select the Referral function. The participant must be enrolled in the ERM program. The web server provides a form to enter basic information about a job applicant. The referral form may also provide the opportunity to specify a particular operating group, an human resources recruiter or representative, a specific job title or other pertinent information. An area of the form is provided to add textual comments regarding the applicant. An employee will have the opportunity to print a hard copy of the referral information if desired. A screen control option that provides the employee with ability to attach an electronic resume is provided. This option activates the email system and provides the referring participant with the opportunity to direct the message to the appropriate hiring manager and/or human resources representative. Another screen control provides the employee with ability to submit the referral, which triggers several events. A referral ID is assigned to the job applicant's information and the referral is saved in the ERM database. The ERM program web server formats a points issuance record for the number of points designated by a parameter within the employee database, which may vary by position. The point transaction is sent to the online point server, where the points are posted to the referring employee's account.

After the referral is saved in the ERM database, an human resources representative or the ERM program administrator updates the status of the referral as the application process proceeds. The referral system provides a function to view pending referrals. The information displayed may include the referral ID, the name of the referring employee, the status of the referral (received, interviewed, not hired, hired, etc) the name of the applicant, and the corresponding job title the applicant has been referred for. The referring employee has the option to view his or her own referrals. A program administrator periodically reviews the referral list and extracts the applicants with a status of "hired". The referral ID is used to identify the employee who referred the applicant and the hiring reward is processed for that employee.

The employee engagement and incentives program also includes an Employee Anniversary awards module. In this module, assuming that the employment anniversary dates of employees are stored within the employee database, the employee engagement and incentives program may award points to employees on pre-determined anniversary dates, such as 1 year of service, 3 years, 5 years, etc. In one embodiment, a human resources administrator ("HR") selects a

group, or certain department within the company, along with a month and year for processing of anniversary awards. The human resources administrator may then view the list of eligible participants, and for each eligible participant, the human resources department may elect to view the detailed information. This information may include the employee's name and address information, SSN, department, company mail address, email address, supervisor's name, supervisor's email address, supervisor's company mail address, anniversary dates, anniversary award level, and a flag indicating approval. human resources validates that all employees deemed eligible to receive a service anniversary award have been correctly identified. When all employees eligible for the reward within the operating group have been identified, a key or screen control may be activated to create the award for all approved employees. A congratulatory email message may be sent to the employee and the supervisor. The email message may direct the employee to a specific page within the employee engagement web site to select a reward. One of the available rewards may be points. If the employee selects points as a reward, a point issuance transaction is formatted and sent to the program administrator online point server and the award points are posted to the account immediately. If the employee opts to redeem a merchandise reward, the shopping basket functionality is provided, including the ability to specify size, color, style and personalization information. After the reward selection is complete and shipping information is specified, the order is captured and forwarded to a fulfillment system for processing.

In support of the ERM suite of product modules designed to engage and reward employees, another component of the employee engagement and incentives program is an employee suggestion module. The employee suggestion module is designed to encourage employee idea generation and then reward the employees with points or other rewards for contributions toward the support of organizational goals. In this module, individuals or teams can submit ideas. Teams submitting ideas can identify the percentage of involvement, and thus award payout, for each team member. There is also automatic email notification to all involved individuals as the idea status changes and various types of ideas can be supported by the same Suggestion module. The employee suggestion module also provides for a comparison of forecast information to actual financial information. This compared information can be tracked within the system for each idea, which can be used to compare with the Cost Benefit and Revenue Generation analysis spreadsheets. The module also provides for dynamic help screens that guide the participants through the various idea statuses, as well as the steps that will occur during each status process.

Individuals or teams are able to submit their ideas online by accessing the Employee Suggestion toolkit within the ERM system. The toolkit will track an idea's progress status as it moves through the process of being submitted, reviewed, approved or declined, and implemented. Figure 14 illustrates the process by which an idea is submitted, reviewed, evaluated and implemented, and how points are awarded to the employees responsible for the suggestion.

As Figure 14 illustrates, an employee with an idea (submitter) begins the idea submission process by logging into the system with a user ID and password 1000. The submitter then elects the option submit an idea, thereby accessing the suggestion module. The system retrieves an idea capture form from the ERM module database at the web server. The idea capture form provides for the capturing of idea data. Individuals or teams may submit ideas. If a team is submitting an idea, a representative is selected to be the submitter. The submitter enters the required idea information and employee information on the idea capture form. Idea information may include at least: Idea Number (system generated); Short description of idea; Business Objective (for example: Safety, Operating Performance, Customer, Financial); Idea Type (for example: Revenue Generation, Cost Savings, Intangible); Audience (Local or Global); and Attachments (an email window will automatically be launched for the Submitter to send attachments). The employee information submitted may include at least information representative of: the Main Submitter; Team Members, if applicable, along with percentage of their involvement that will be used to determine the award payout; and the Coordinator selected. The Coordinator will be selected by the Submitter from a drop down box 1008, wherein coordinator names retrieved from the ERM module database 1010 are displayed.

Following the submission of idea information and employee information via transmission of the idea capture form, an email is automatically sent to the Coordinator selected alerting them of the new idea 1012. The Coordinator reviews the idea submitted by the email for eligibility to participate in the program and ensures that there hasn't been a duplicate idea already submitted. The Coordinator works with the Submitter to gather any outstanding requirements as well as additional documentation. The Coordinator will also review the dollar or cost benefit information with the Submitter, as well as ensuring the proper Idea Type has been selected. If the Coordinator feels that additional information or explanations are needed before being able to pass it on to an Evaluator, the Coordinator can mark the idea as "Modify" which allows the Submitter to edit the idea and resubmit.

In working with the Submitter to gather any outstanding requirements as well as additional documentation, the Coordinator first determines whether there is adequate information in the idea submitted 1016. If the Coordinator determines that

there is inadequate information, the idea is flagged as "Modify" 1018 and the Coordinator notifies the Submitter of the inadequacy 1020. The Submitter then retrieves the suggestion information from the database and modifies and/or enhances the idea 1022 and causes it to be stored in the ERM program database 1010. An email is again automatically sent to the Coordinator selected alerting them of the modified new idea 1012. If the Coordinator determines that there is adequate information 1016, the Coordinator then determines whether the idea submitted is eligible to participate 1024. If the Coordinator determines that the idea submitted is not eligible to participate, it is flagged as not approved 1026 and the Coordinator notifies the Submitter that the idea submitted is not eligible to participate 1028. If the Coordinator determines that the idea submitted is eligible to participate 1024, the Coordinator then determines whether the idea has been previously submitted 1030. If the Coordinator determines that the idea has been previously submitted, it is flagged as not approved 1032 and the Coordinator notifies the Submitter that the idea submitted has been previously submitted 1034. If the Coordinator determines that the idea has not been previously submitted, the Coordinator updates idea status from "Coordinator Review" to "Evaluation" or "Not Approved" and stores the updated status in the ERM program database 1040. Next, the Coordinator adds additional comments; Dollar Benefit Information (for example: revenue generation spreadsheet); and Cost Benefit Information (for example: cost analysis spreadsheet) 1042 and stores the information added in the ERM program database 1040. The Coordinator then assigns an Evaluator 1044 and stores this information in the ERM program database 1040. Next, an email is automatically sent to the Evaluator alerting them of an assigned idea 1046, as well as copied to the Submitter 1048. Next, the Evaluator reviews the ideas submitted, approves and assigns an implementation team / individual 1050 and updates the idea status to "Test/Implementation" and stores the updated status information in the ERM program database 1052. The Implementation team will be notified via email of the idea 1054, along with the Submitter 1056 and Coordinator 1058 as a result of their being copied on the email. Once the idea has been implemented 1060, the Coordinator will update the ERM program database with any comments from the Implementation team, as well as notify the Submitter of the idea's status 1062. Also, the idea status will be updated to "Completed" and stored in the ERM program database 1064.

Next, The Award Coordinator is automatically notified via email that the idea has been implemented 1066, 1068. The Award Coordinator then determines the award payout amount for the idea 1070, by taking into consideration the following aspects of the idea: rule structure of the Suggestion program; cost benefit analysis;

revenue generation analysis; and any other aspects deemed appropriate. Next, it is determined whether the idea submitted is a team based idea 1072. If the idea submitted is not a team based idea 1074, the point update transactions are formatted for all award recipients 1078. If the idea submitted is a team based idea, the Award Coordinator then reviews, updates and approves award percentages and point payout amounts for all team members 1074 and stored the data in the ERM program database 1076. Next, the point update transactions are formatted for all award recipients 1078. If the idea submitted is not a team based idea 1074, the point update transactions are formatted for all award recipients 1078.

Next, a point issuance transaction will be formatted for the suggestor, and transmitted real-time to the on-line point server at the program administrator host system 1080, where it is posted to the employee's account in the on-line point server database 1082. In the present embodiment, the awards are points. However, it is to be understood that the awards could be in the form of merchandise, gift certificates, cash, etc. The specific award vehicle may be selected by the client. If the program coordinator host system on-line point server updates the employee's central account, the host system automatically transmits a positive acknowledgment back to the ERM system. The ERM system then determines whether there are additional point transactions to send to the central online point server at the program coordinator host system 1082. If there are additional point transactions, the user enrolled in the employee service incentive/engagement program sends additional points issuance transactions for the nominee's account to the central online point server 1086. If there are no additional point transactions, point processing is completed and a congratulatory email is delivered to the Submitter(s) and it may have an electronic award certificate attached thereto 1088. In the preferred embodiment, the attached certificate is a PDF file. It is to be understood that the attached certificate can be in any electronic format wherein the certificate can be attached to an email and then accessed and printed from the workstation of the user. The Coordinator is copied on the email 1090. If the ERM system does not receive a transmission of positive acknowledgment from the host system 1084, the ERM system attempts to resend data reflecting the points earned for the recognition 1094 to the central online point server 1080 at the program coordinator host system, so that the employee's account in the on-line point server database 1082 will be updated real-time to reflect the points earned for the recognition. Alternatively, the ERM system may queue the transaction for store/forward batch processing at a later time 1096.

WHAT IS CLAIMED IS:

1. A computer implemented real-time transaction point accumulation system in which a award program participant earns and accumulates points immediately in centralized data storage for transactions at any one of a plurality of point servers networked to a host incentive award system, the system comprising:
- 5 (a) point servers comprising:
- (i) at least one in-store server system, including a point-of-sale system;
- (ii) at least one on-line interactive consumer web site server; and
- 10 (iii) an interactive employee engagement and incentive web site server
- (b) a host incentive award system having at least:
- (i) a host processor;
- (ii) centralized data storage electrically coupled to said host
- 15 processor, the centralized data storage including a plurality of award program participant records, wherein each of said award program participant records includes at least a program participant point balance;
- (iii) a host communicator electrically coupled to said host
- 20 processor for receiving request for said records from said point servers, said host communicator transmitting at least said point balance to said point servers;
- (c) wherein said in-store server system, consumer web site server, and said employee engagement and incentive web site each processes transactions to determine points earned on said transactions, said point servers further causing said
- 25 point balance stored in the centralized data storage to be immediately updated by transmitting in real-time at the conclusion of each transaction said points earned to host processor, wherein the points earned for said transaction are added to said point balance to create an updated point balance in centralized data storage.
- 30 2. The computer implemented system of claim 1 wherein said at least one on-line interactive consumer web site server comprises at least:
- (a) a web site processor;
- (b) a web site data storage electrically coupled to said web site processor; and
- 35 (c) a web site communicator electrically coupled to said web site processor for transmitting requests for award program participant account data; said interactive web site requesting and receiving said award program participant account data from said centralized data storage and storing said

5 data which includes at least an award point balance in temporary data storage, said interactive web site calculating point earned for each award and transmitting said points earned in real-time at the conclusion of a transaction to host processor, wherein the points earned for said transaction are added to said point balance to create an updated point balance in centralized data storage.

10 3. The computer implemented system of claim 2 wherein the web site processor determines points earned based on the dollar amount of the current sales transaction.

15 4. The computer implemented system of claim 2 wherein each said award program participant record at least includes data representing said award program participant point balance and said award program participant account number.

20 5. A computer implemented system in which individuals of an organization can be awarded points immediately in centralized data storage for achieving goals and exhibiting behavior deemed desirable to the organization, the system comprising:

(a) an organization server including:

(i) a web site processor;

(ii) a web site data storage electrically coupled to said web site processor;

25 (iii) data input device electrically coupled to said web site processor for interactive communication with said web site processor;

(b) a host incentive award system electrically coupled to said organization server, said host incentive award system having at least:

(i) a host processor;

30 (ii) centralized data storage electrically coupled to said host processor, the centralized data storage including a plurality of organization member records, wherein each organization member record includes at least an organization member award point balance and account identification number;

35 (iii) a host communicator electrically coupled to said host processor for receiving requests for said participant records from said organization server, said host communicator transmitting at least said

award point balance to said organization server upon receiving a unique organization member identifier;

wherein said organization server interactively awards points to an organization nominee member upon the request of an organization nominator member as an incentive, said points awarded are immediately transmitted to said centralized data storage and added to points previously stored in said organization nominee member record to create an updated organization member account point balance that is immediately available for redemption in exchange for products and services at participating retailer systems networked to said host incentive award system.

6. The computer implemented system of claim 5 wherein said organization server immediately notifies said organization nominee member of said incentive and points awarded.

7. The computer implemented system of claim 6 wherein said immediate notification is transmitted by electronic mail.

8. The computer implemented system of claim 7 wherein said electronic mail transmitted includes a hyperlink to a web page including products and services available for on-line redemption of said award points.

9. The computer implemented system of claim 6 wherein said immediate notification is transmitted immediately by mail on paper.

10. The computer implemented system of claim 5 wherein said organization server interactively awards behavior currency to an organization nominee member at the request of an organization nominator member as a reward for the nominee exhibiting certain behavior that the organization encourages.

11. The computer implemented system of claim 5 wherein said organization nominee member is an employee of the organization and said organization nominator member is an employee of the organization.

12. The computer implemented system of claim 11 wherein said organization nominator member is a supervising or managing employee of the organization over said organization nominee member.

13. The computer implemented system of claim 11 wherein said organization nominator member is an organizational peer employee of said organization nominee member.

5 14. The computer implemented system of claim 5 wherein each said organization member record at least includes data representing said organization member account point balance and said organization member unique account number.

10 15. The computer implemented system of claim 5 wherein each said organization member record at least includes data representing said organization member's profile.

15 16. The computer implemented system of claim 5, wherein said individual is an employee and said organization is an employer of said employee, said web site data storage including a plurality of employee data records representative of employees that are eligible for participation in or enrolled in an employee relationship management program.

20 17. The computer implemented system of claim 5, wherein said web site processor includes an interactive web application that allows employees to enroll in the employee relationship management program.

25 18. The computer implemented system of claim 17, wherein said interactive web application allows employees to enroll in the employee relationship management program by completing an electronic enrollment form that collects said employees' profiles and stores said profile data for each said employee in an associated employee data record.

1/29

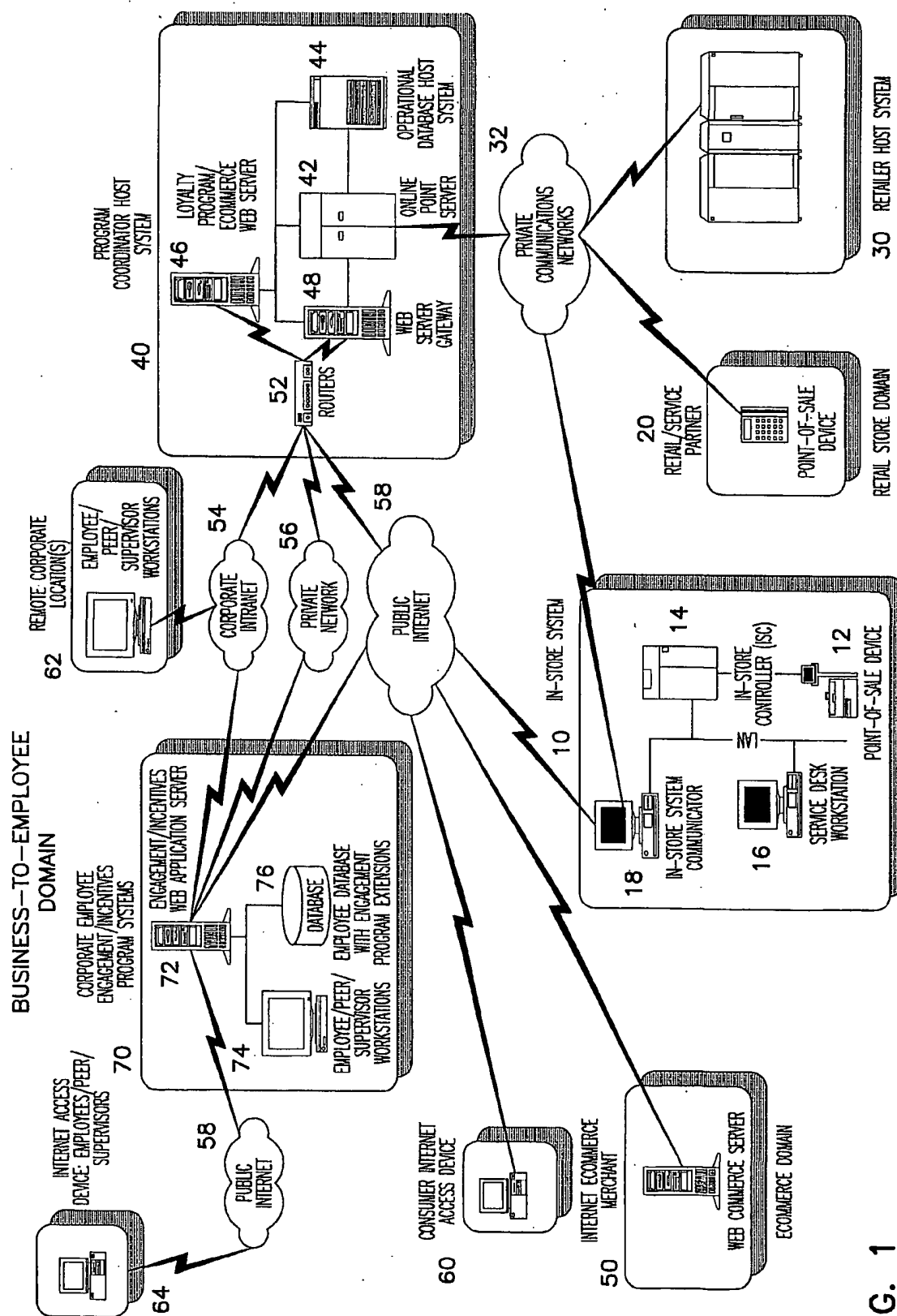
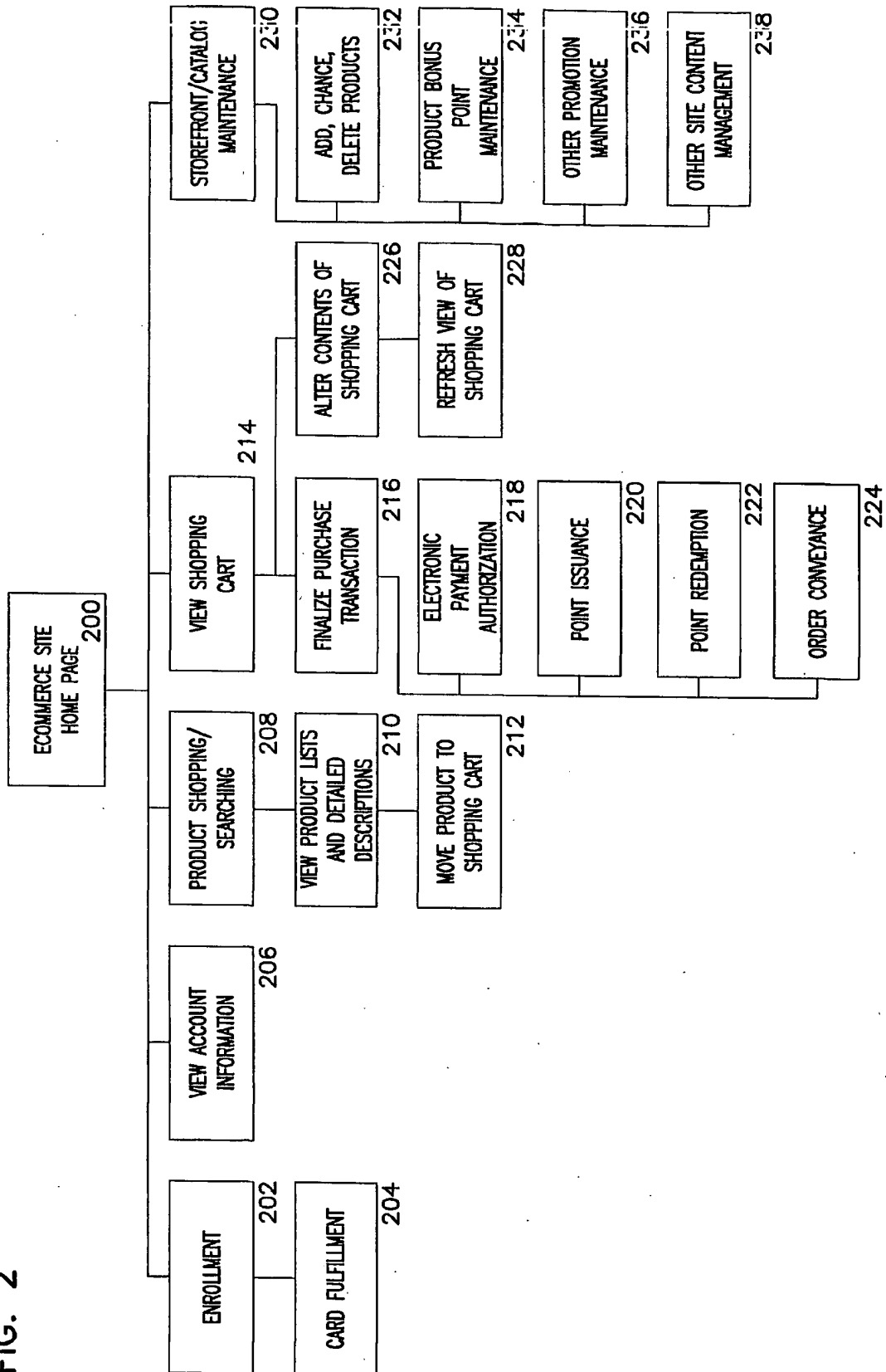


FIG. 1

2/29

FIG. 2



3/29

FIG. 3A

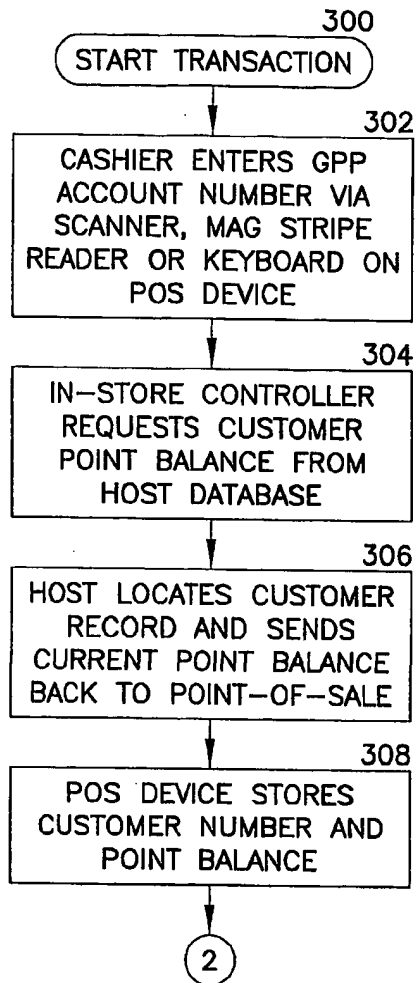
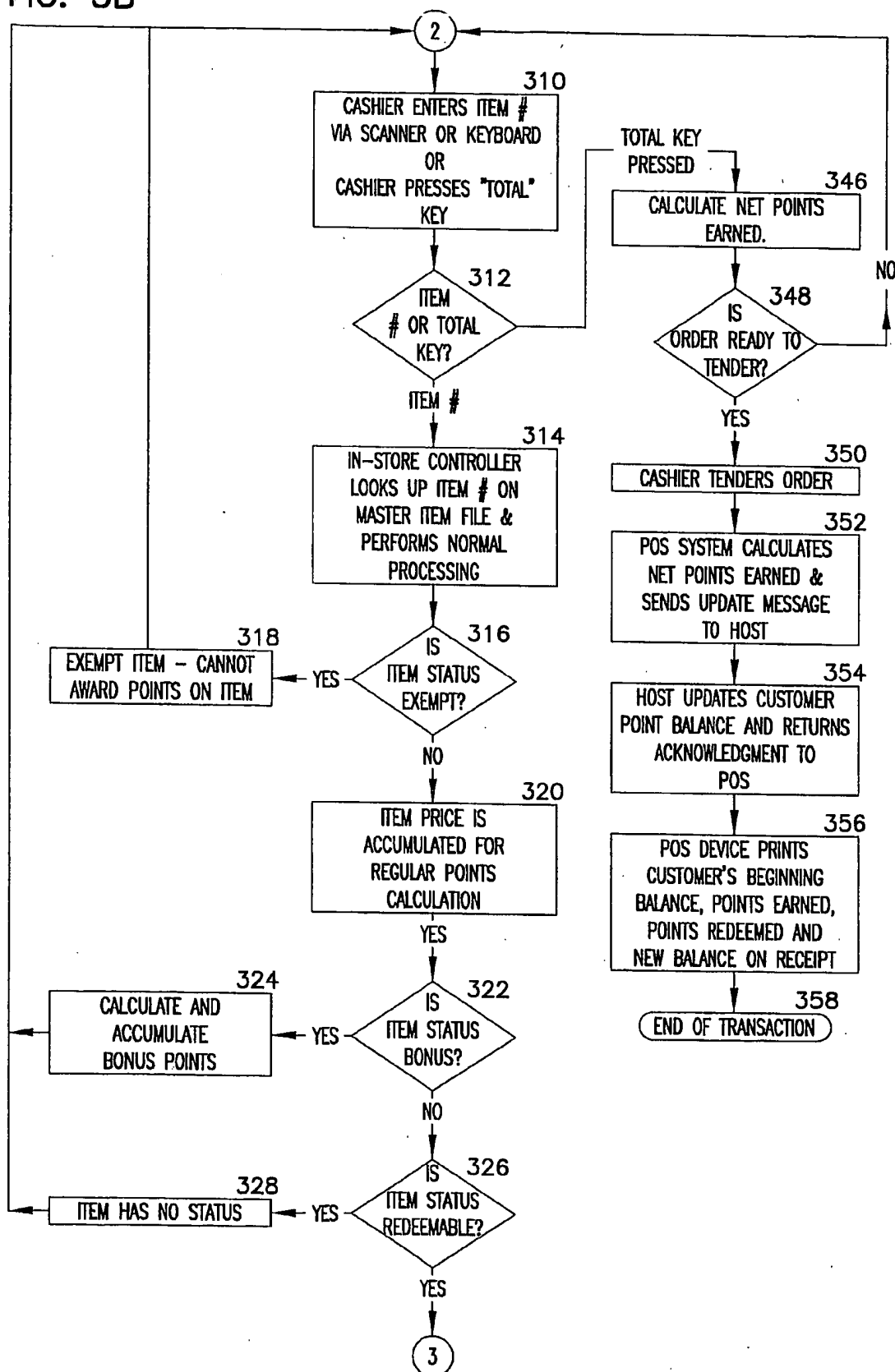


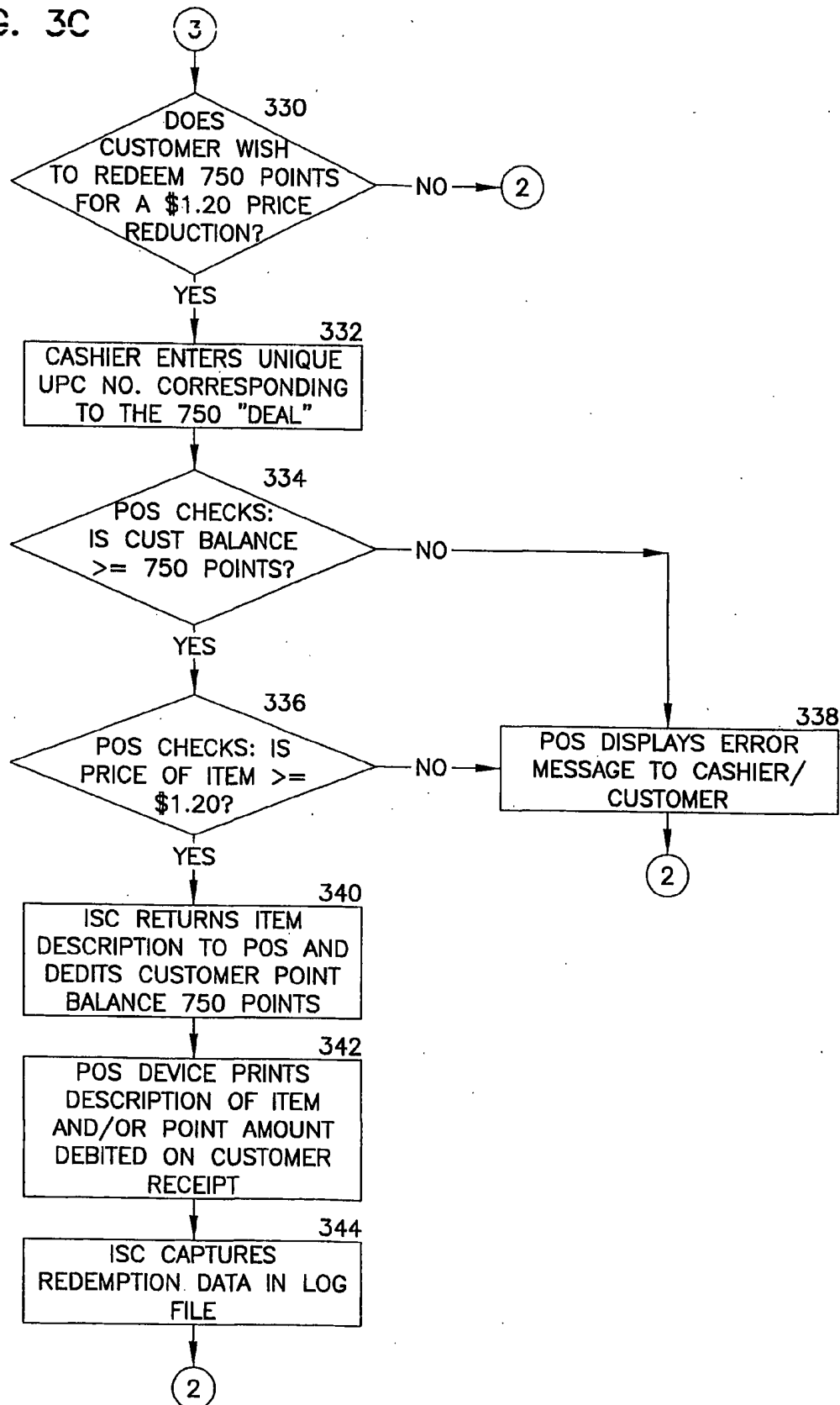
FIG. 3B

4/29



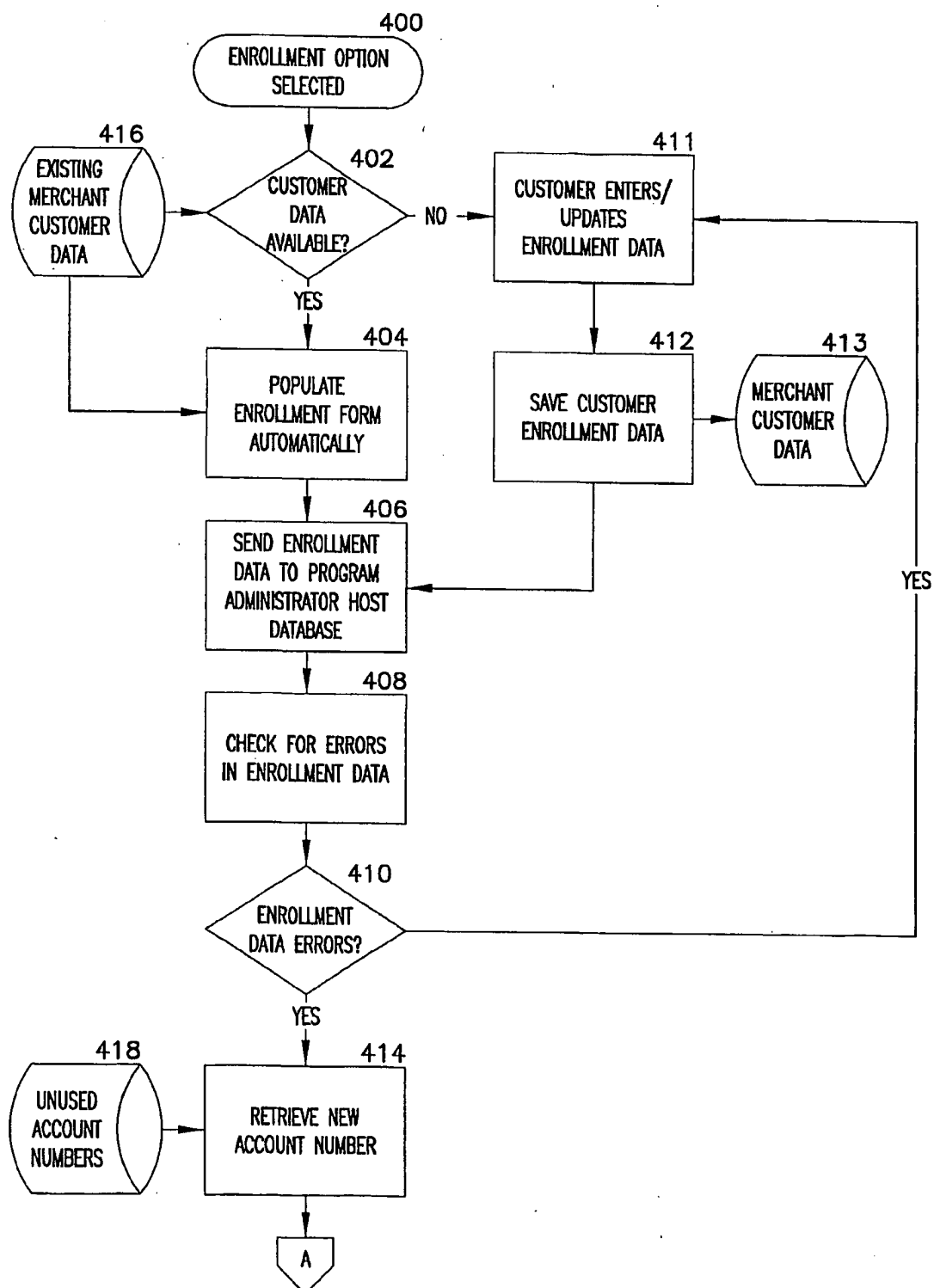
5/29

FIG. 3C



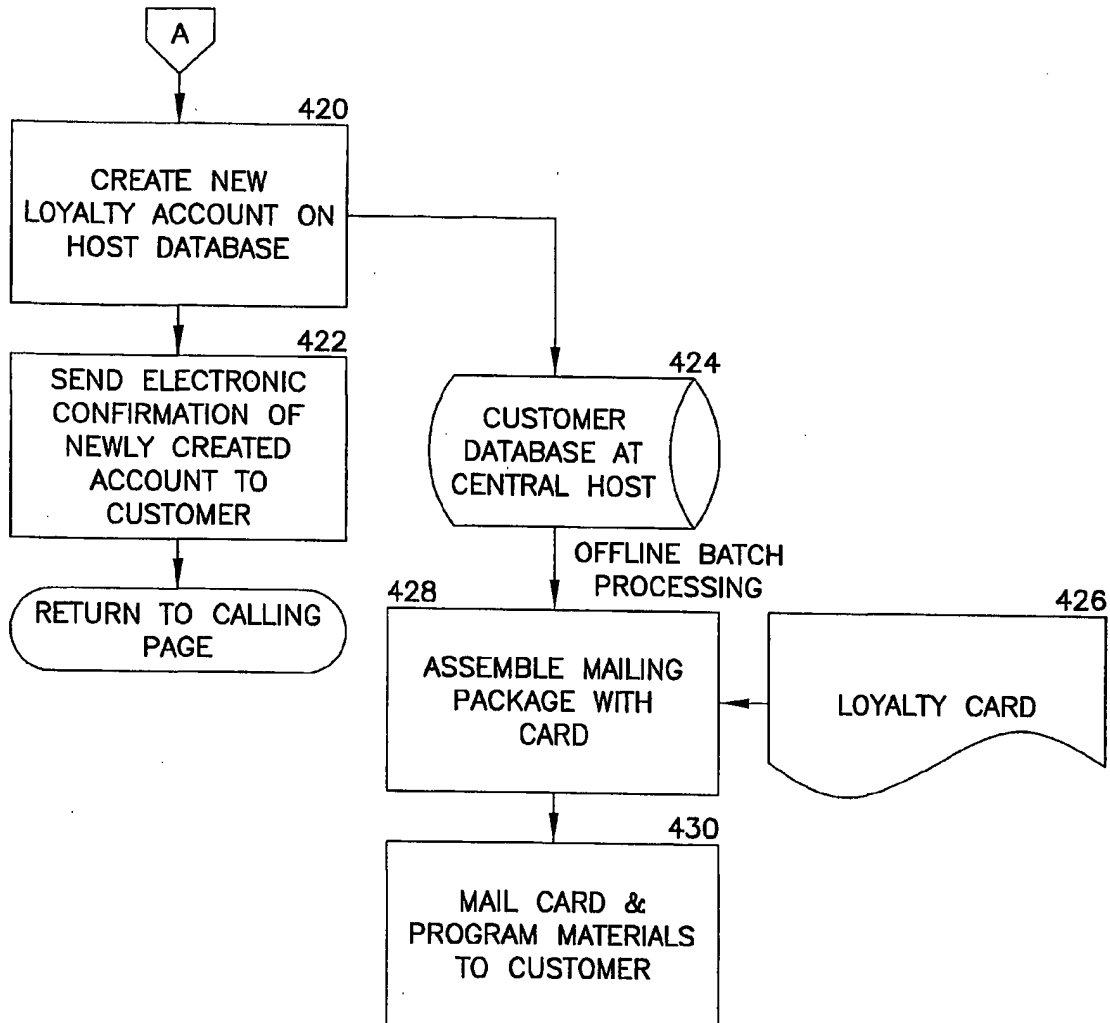
6/29

FIG. 4A



7/29

FIG. 4B



8/29

FIG. 5

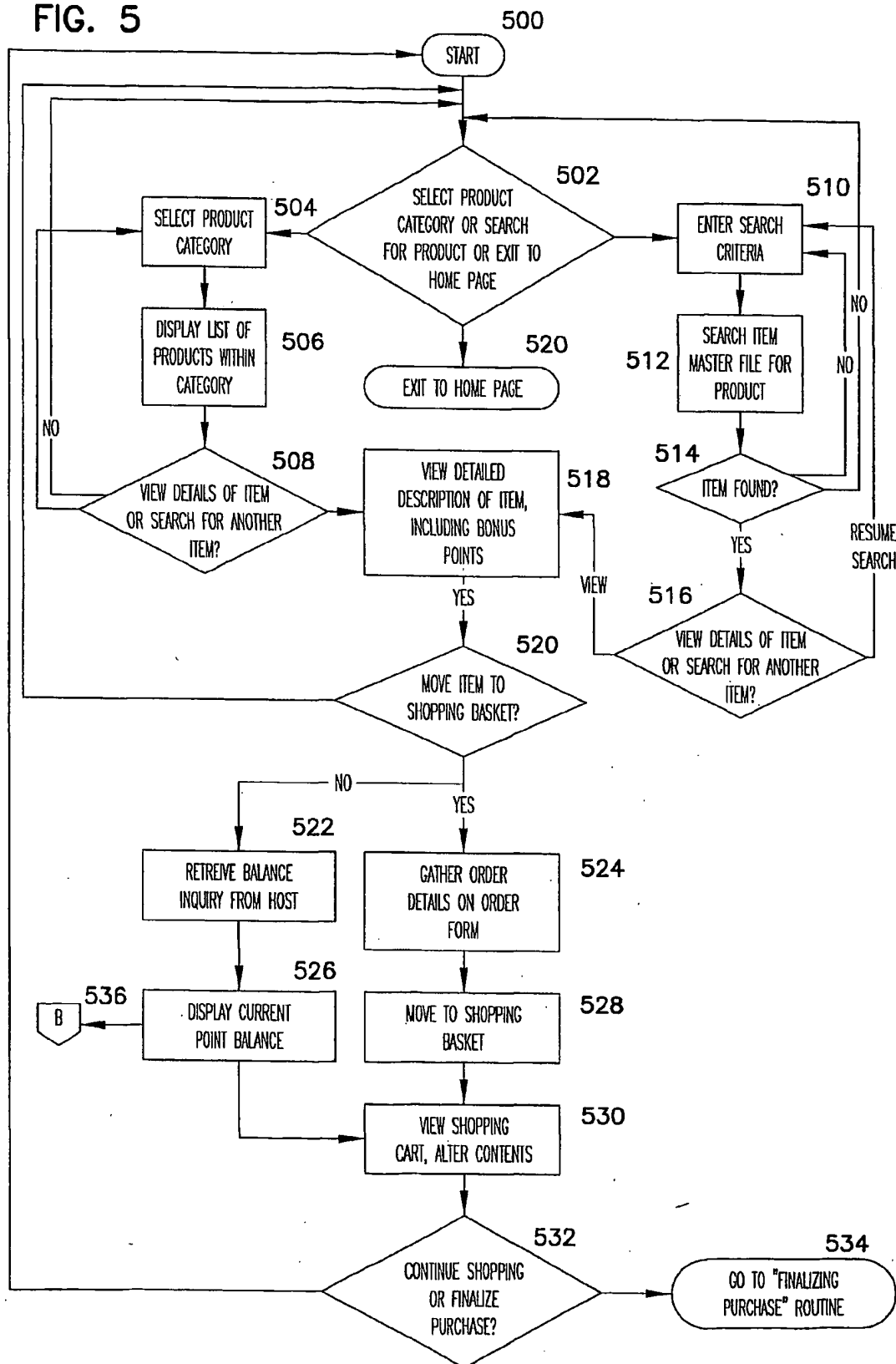


FIG. 6A

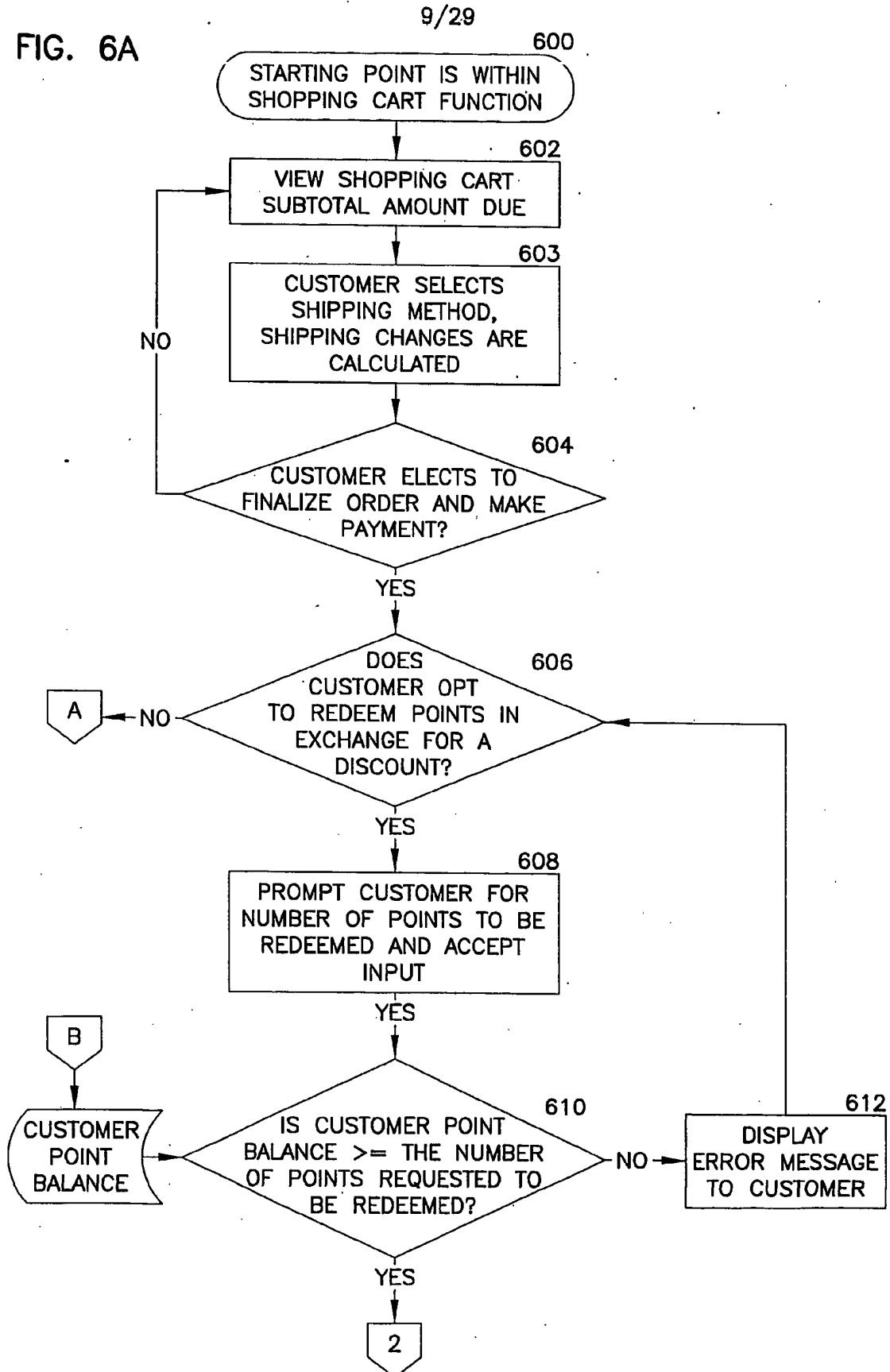
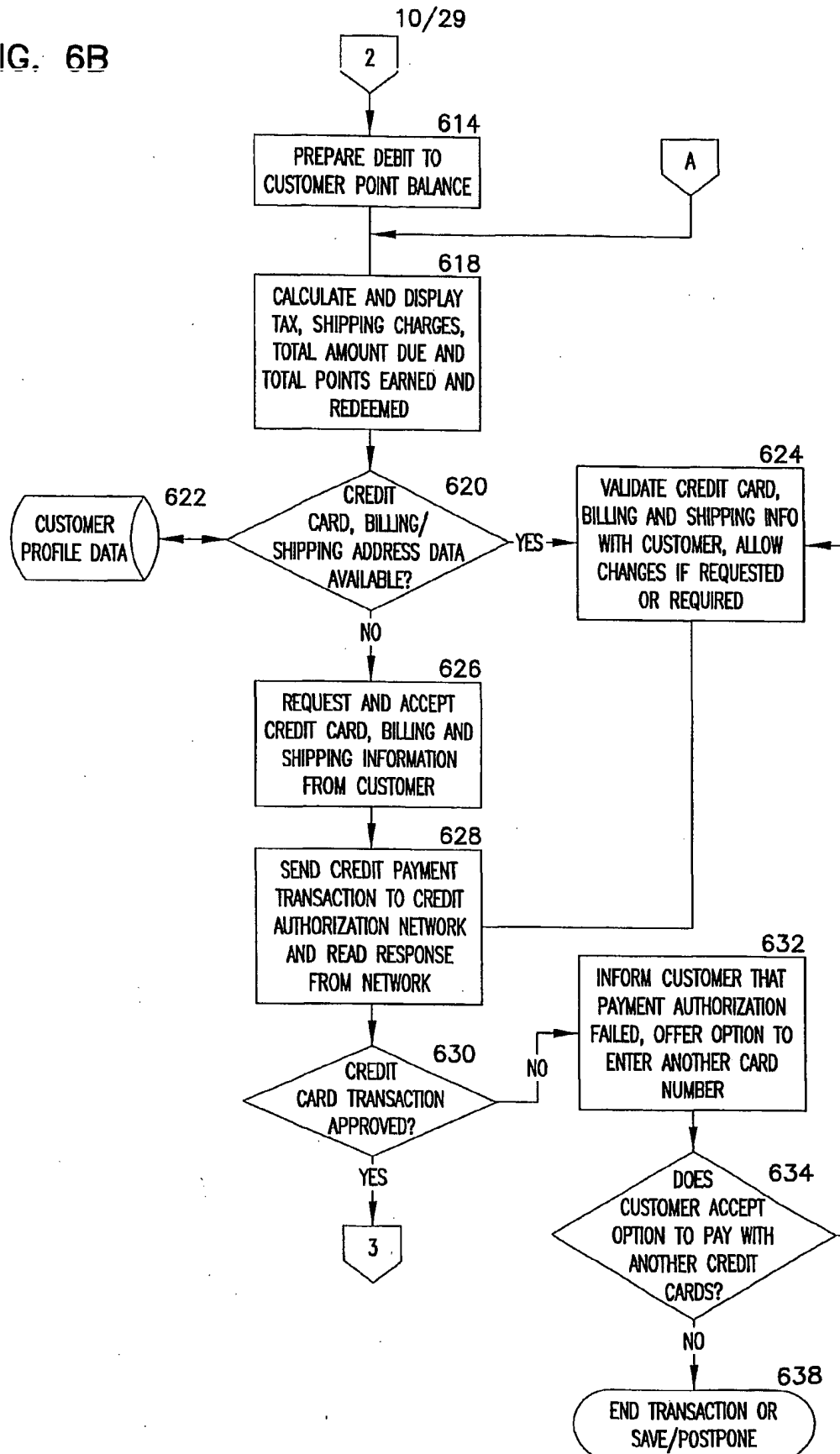
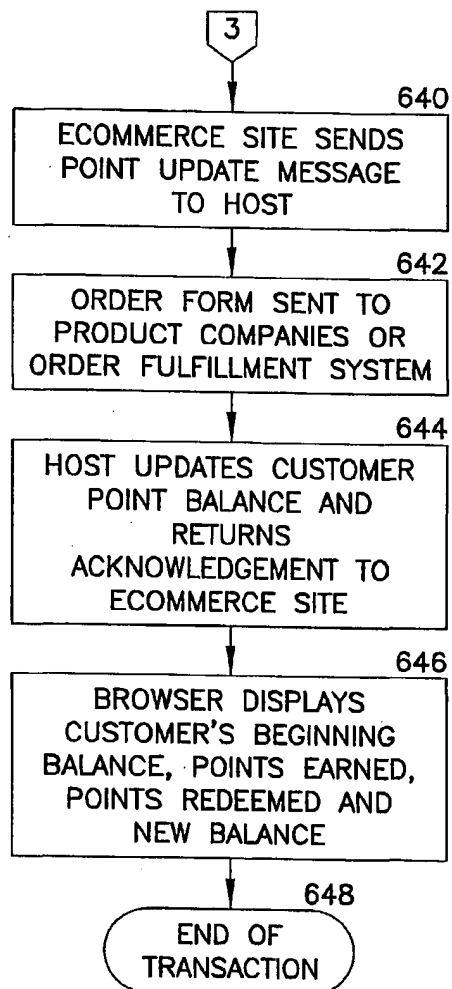


FIG. 6B



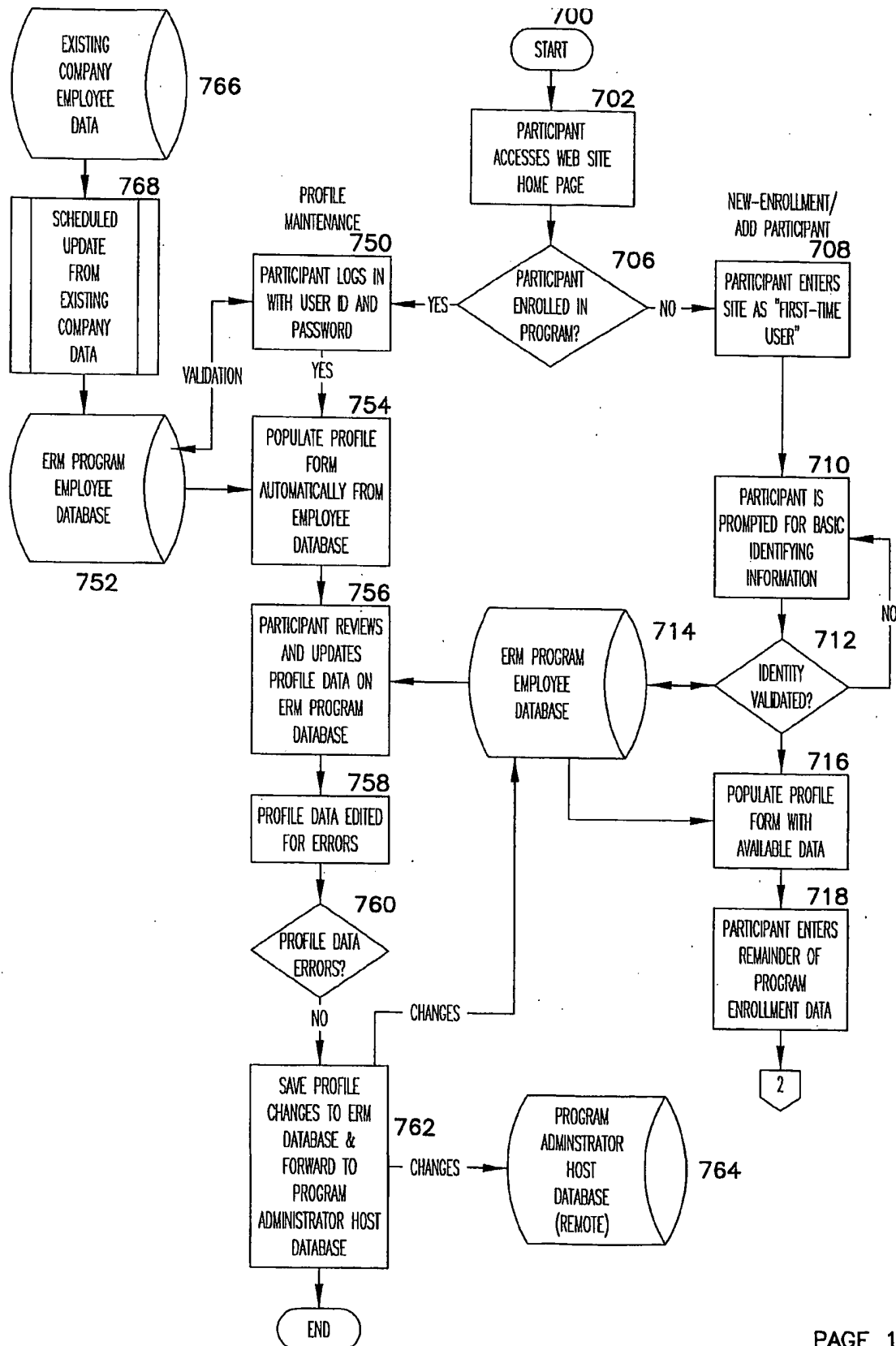
11/29

FIG. 6C



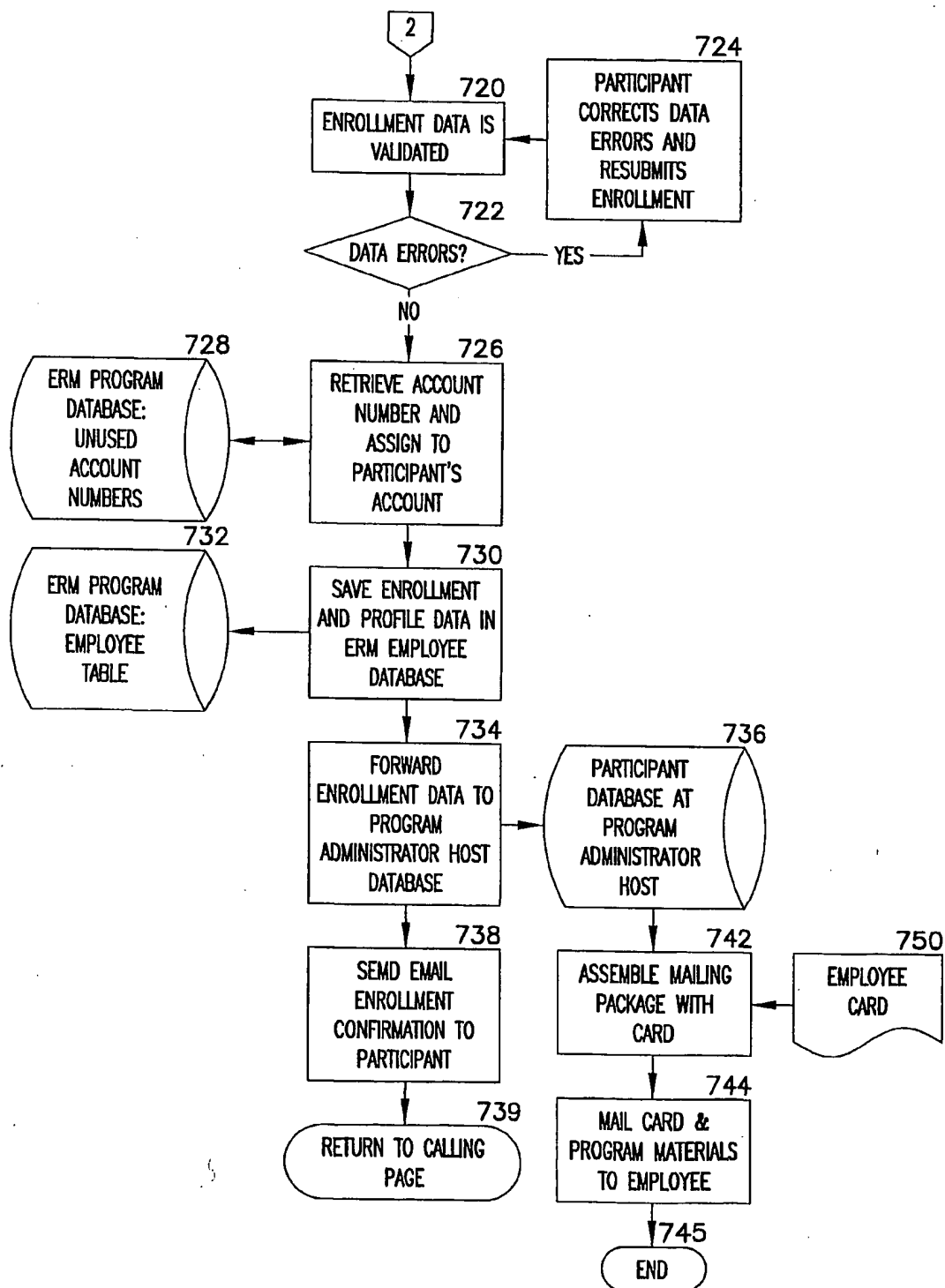
12/29

FIG. 7A



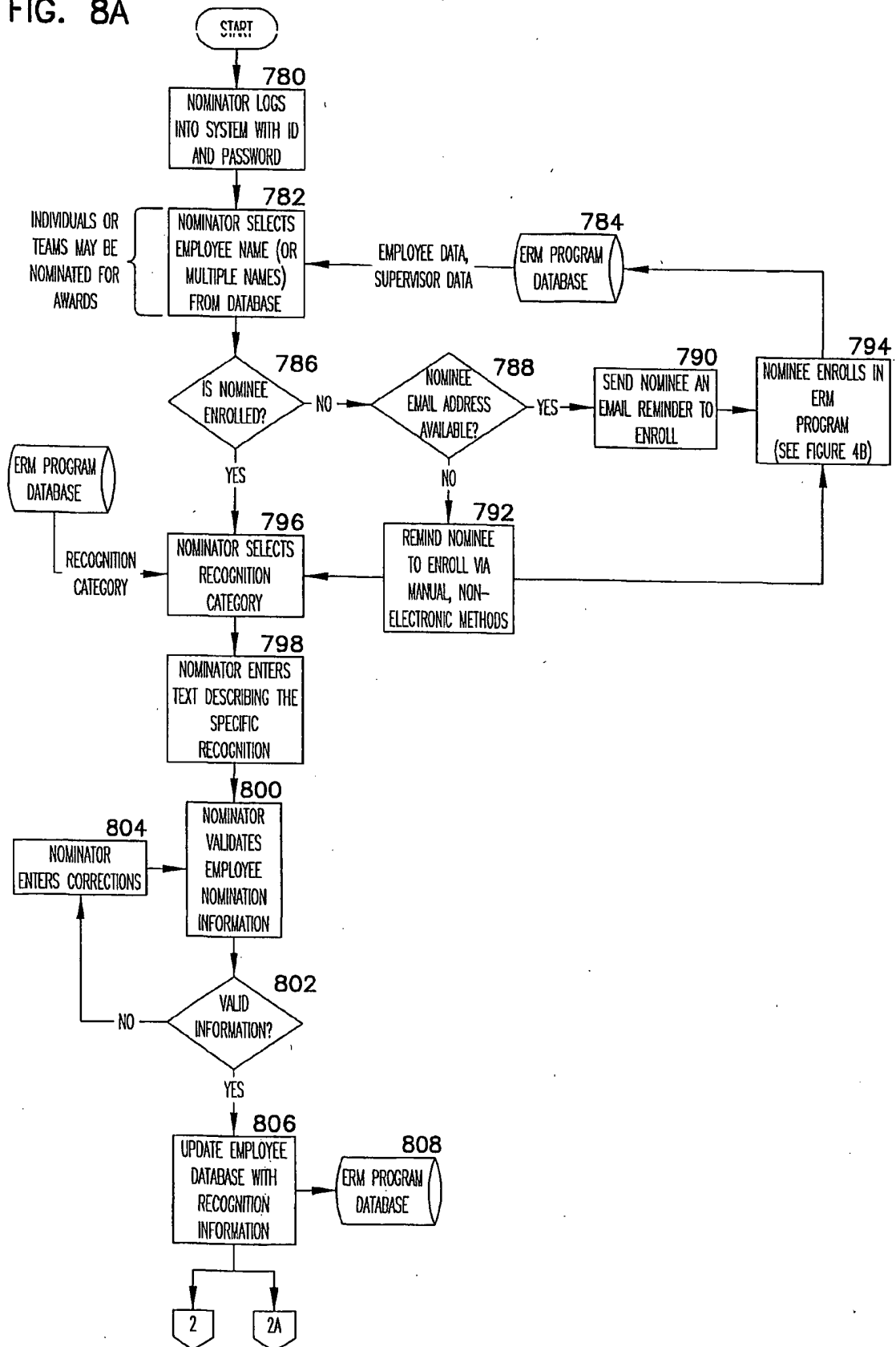
13/29

FIG. 7B



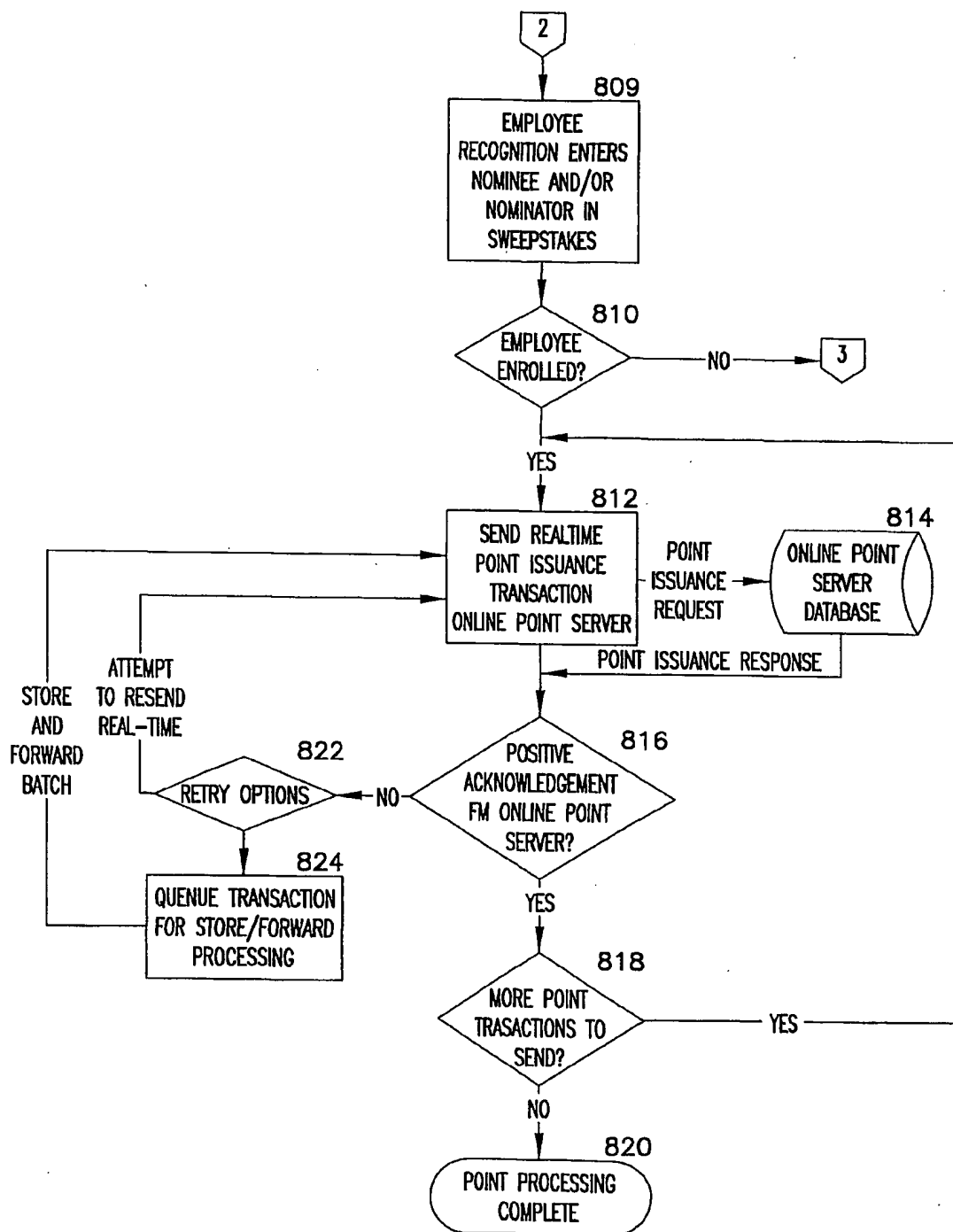
14/29

FIG. 8A



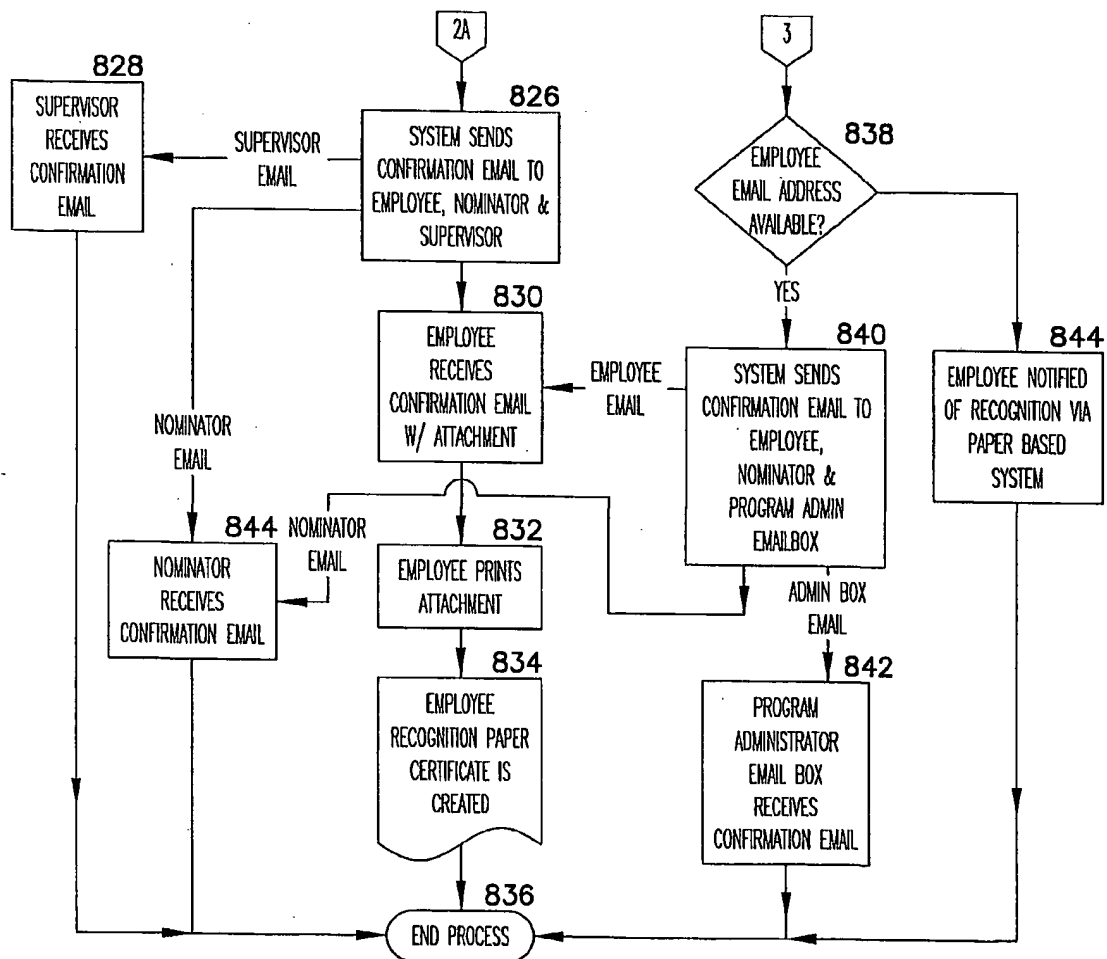
15/29

FIG. 8B



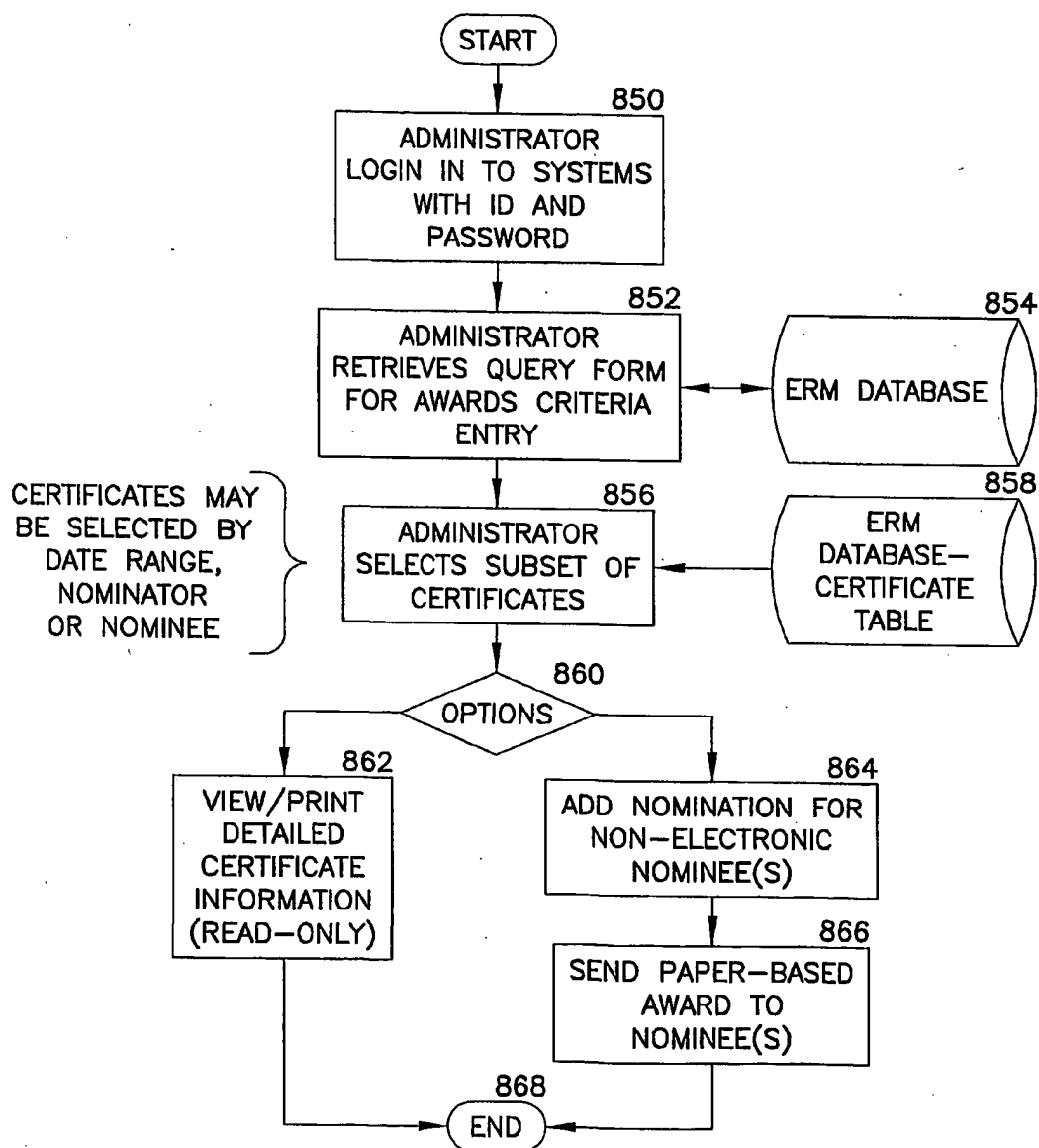
16/29

FIG. 8C



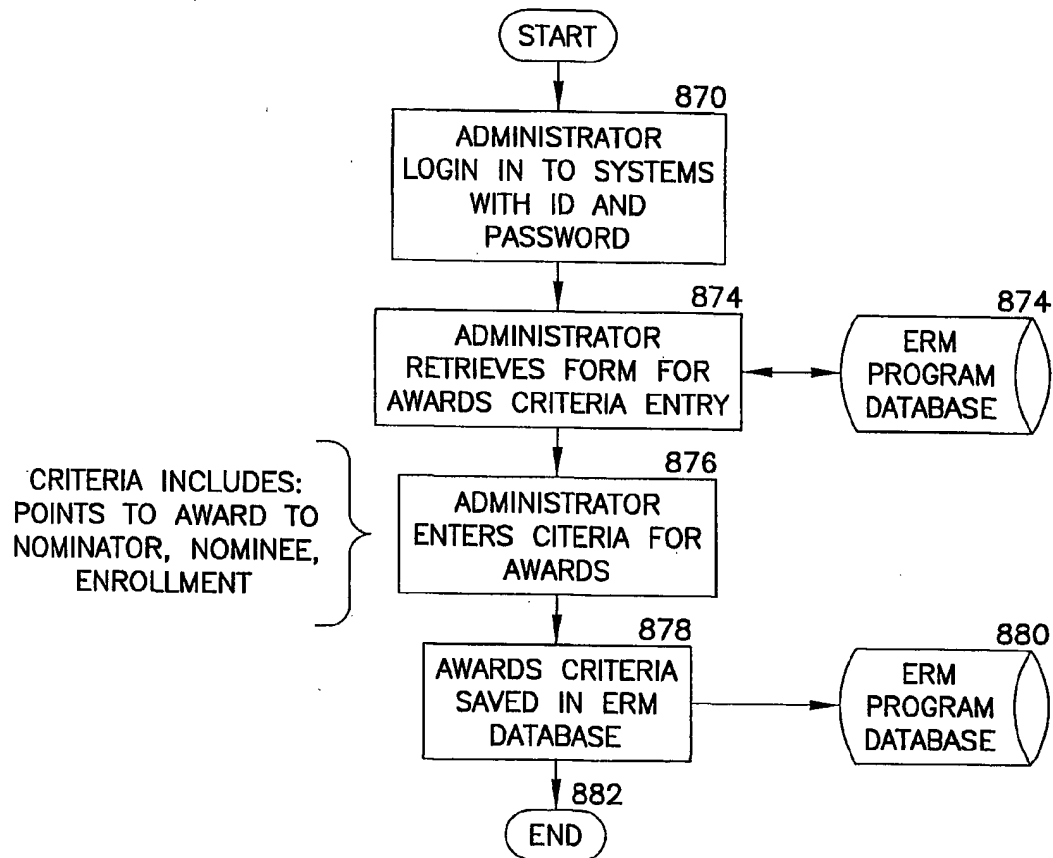
17/29

FIG. 9



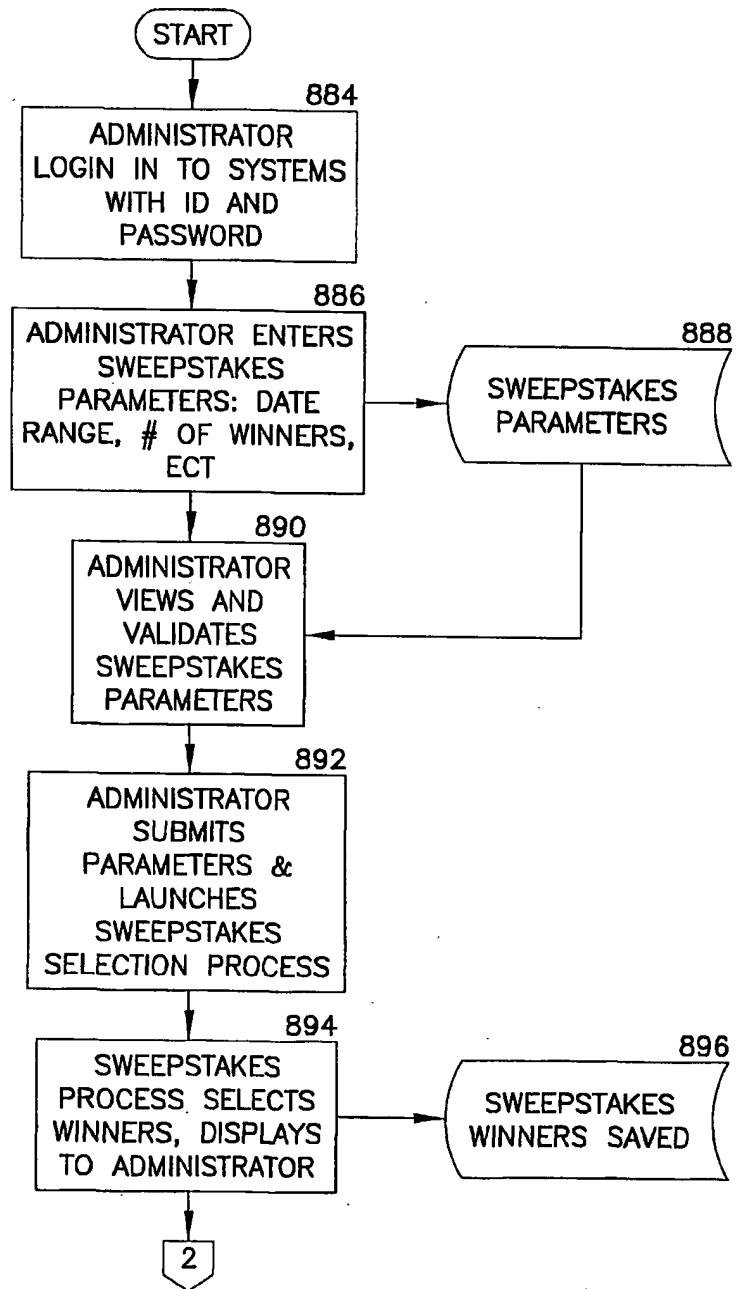
18/29

FIG. 10



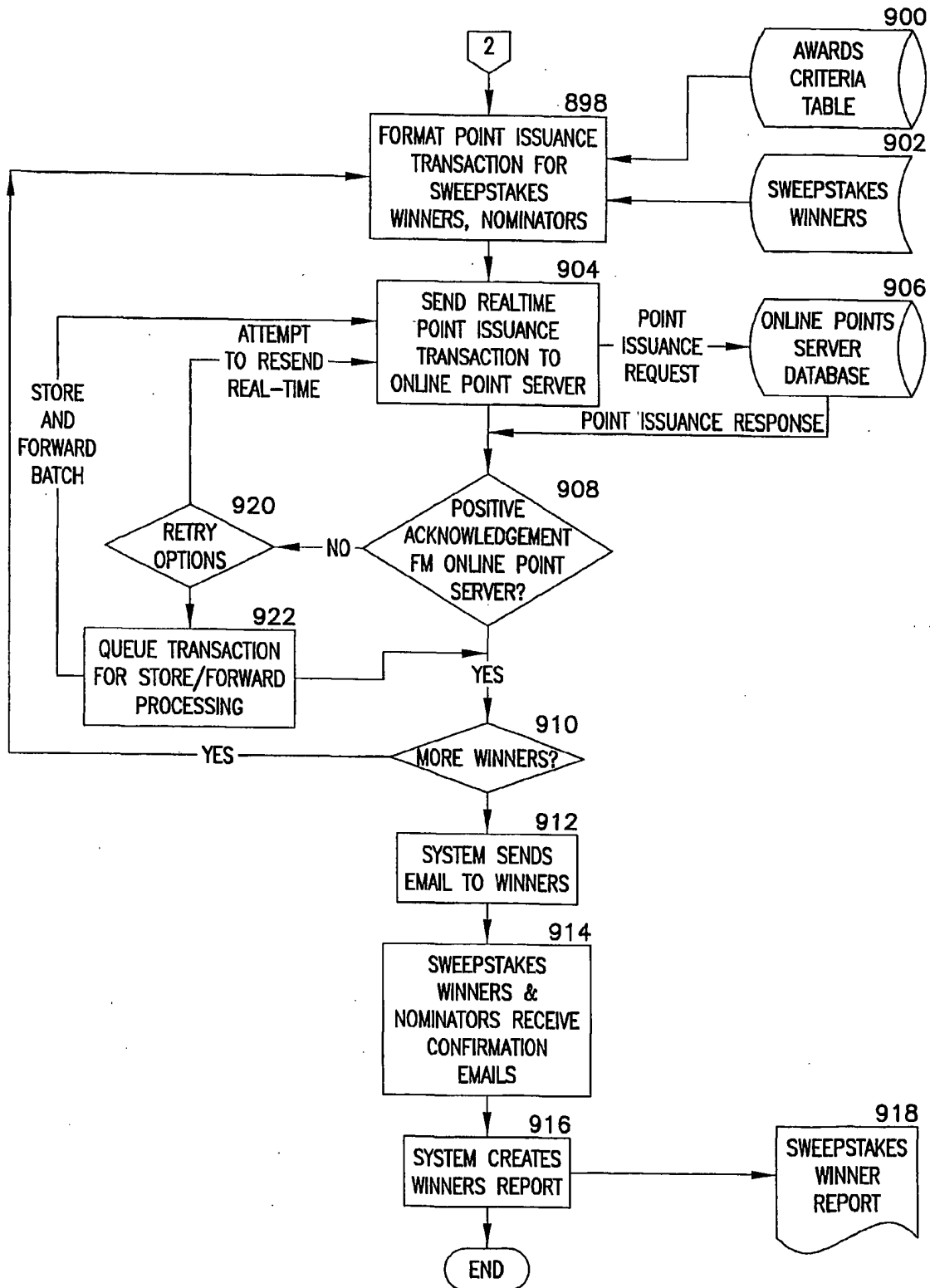
19/29

FIG. 11A



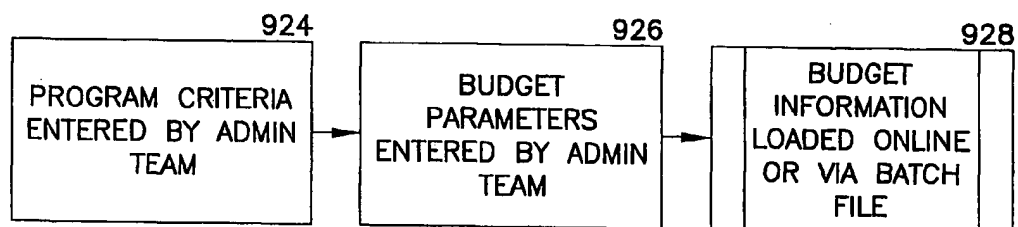
20/29

FIG. 11B



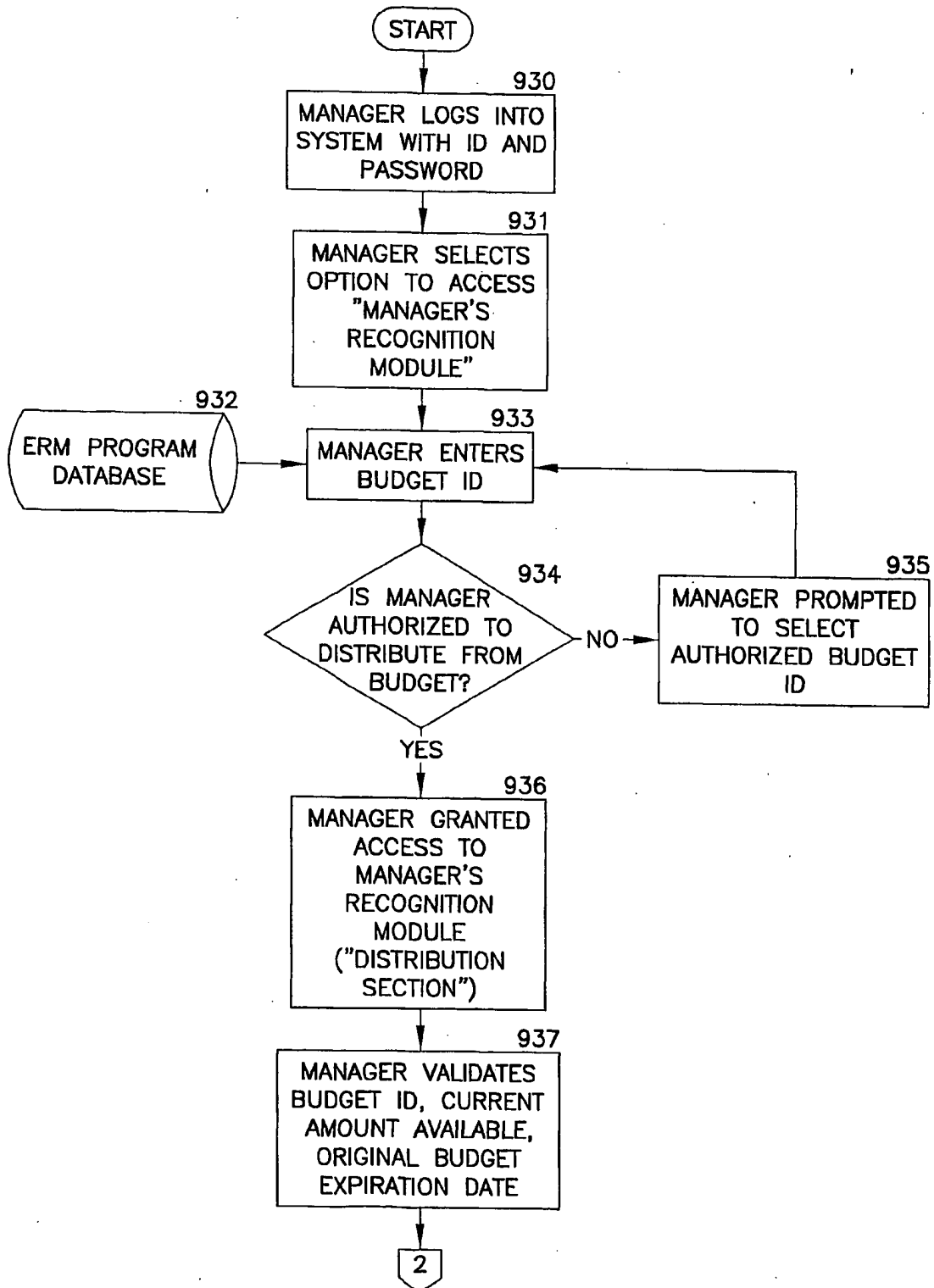
21/29

FIG. 12



22/29

FIG. 13A



23/29

FIG. 13B

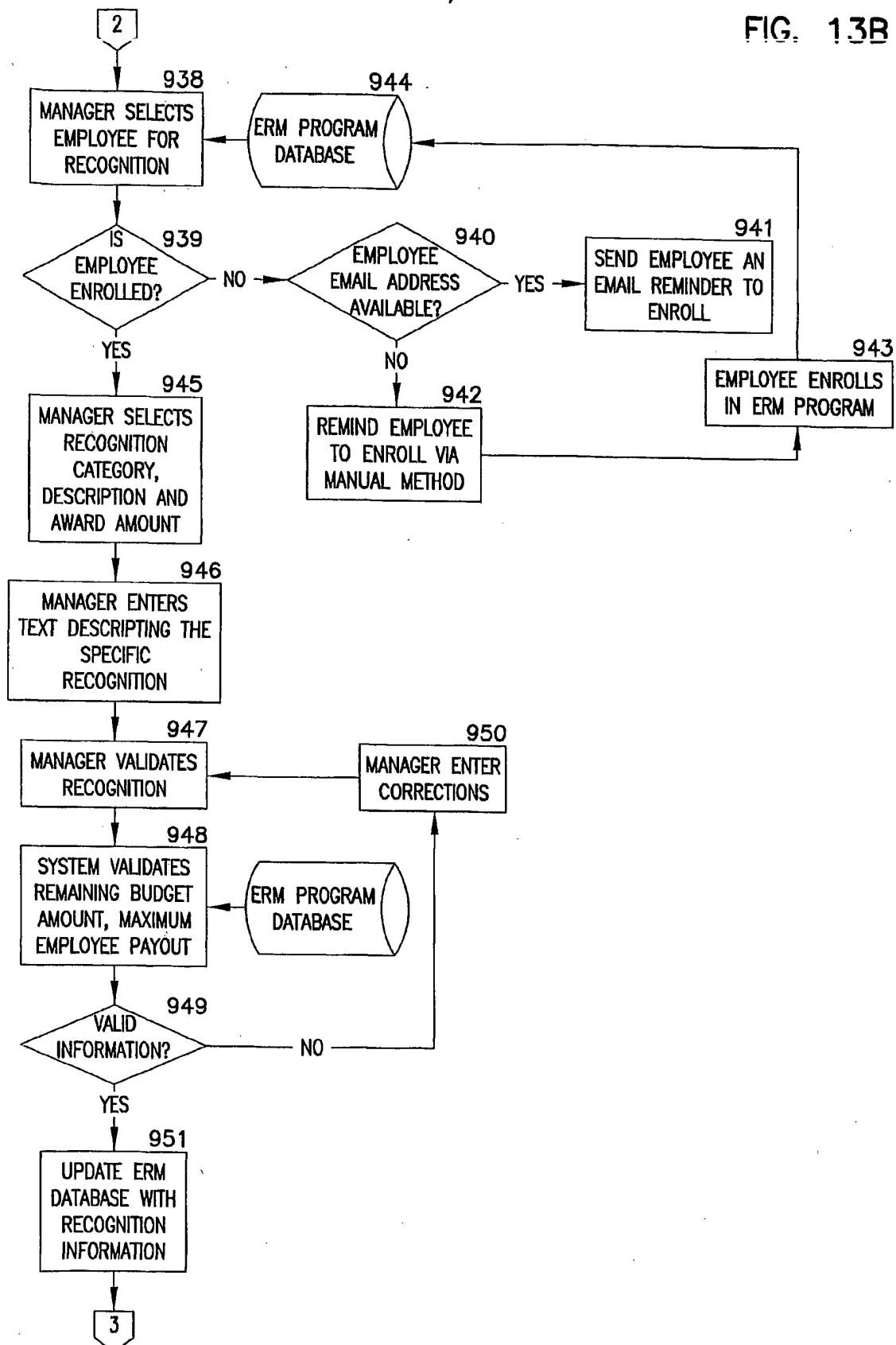
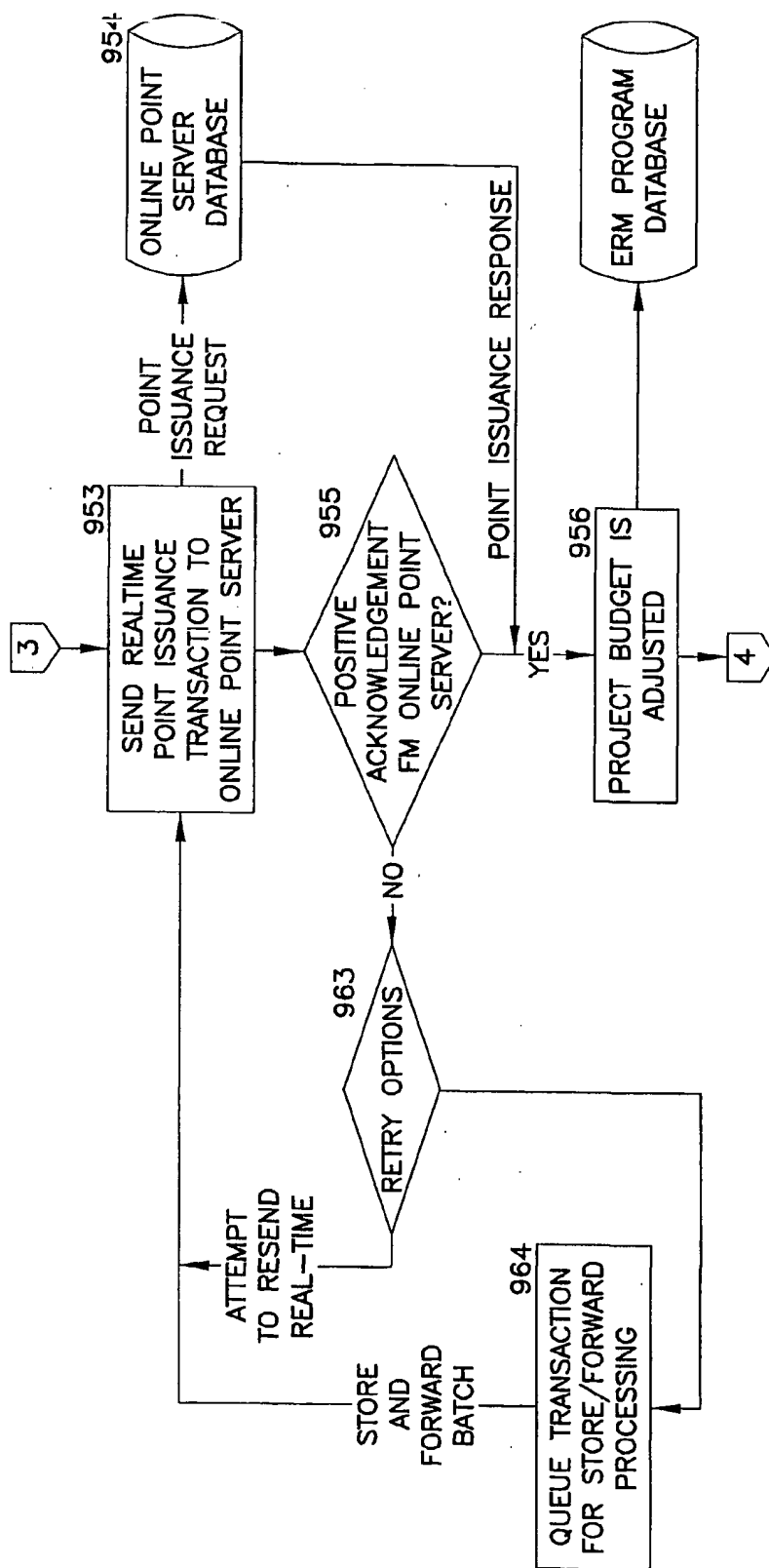
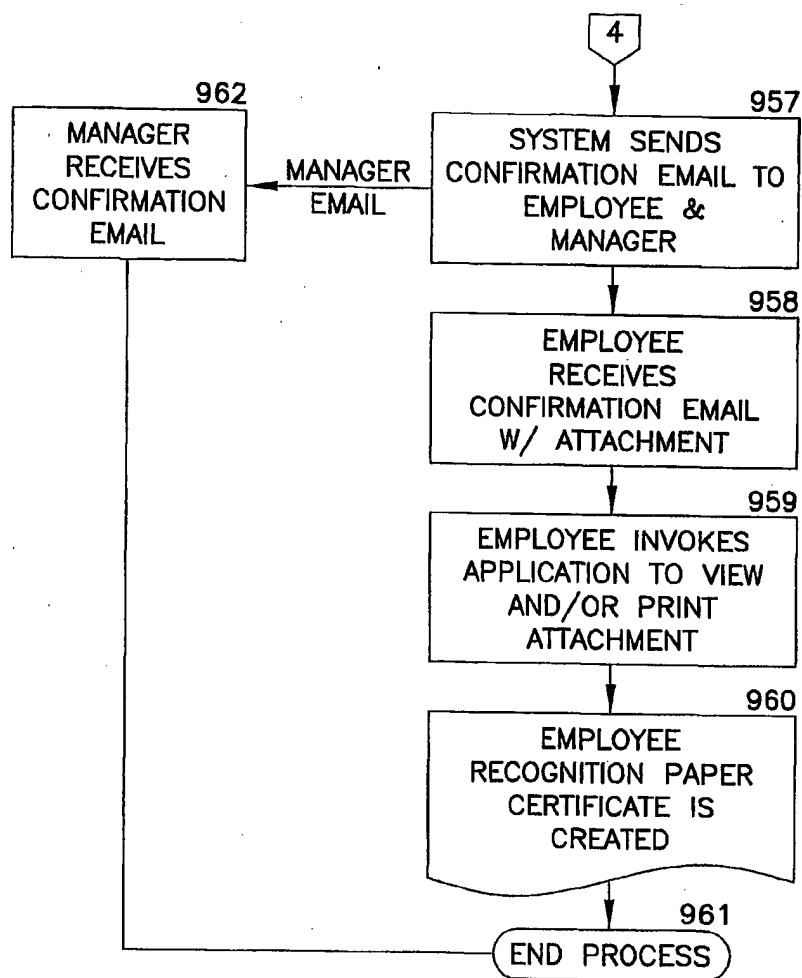


FIG. 13C



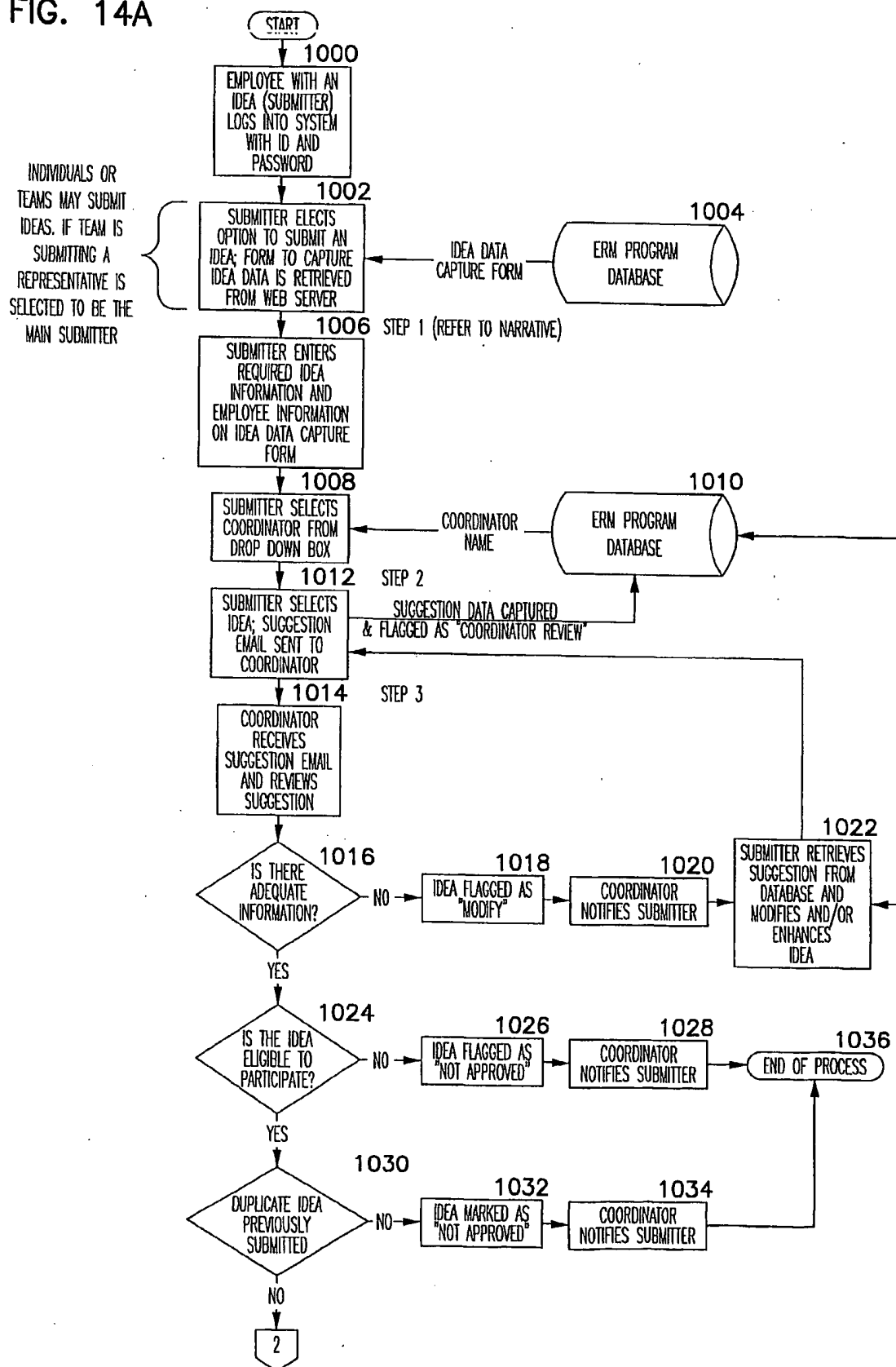
25/29

FIG. 13D



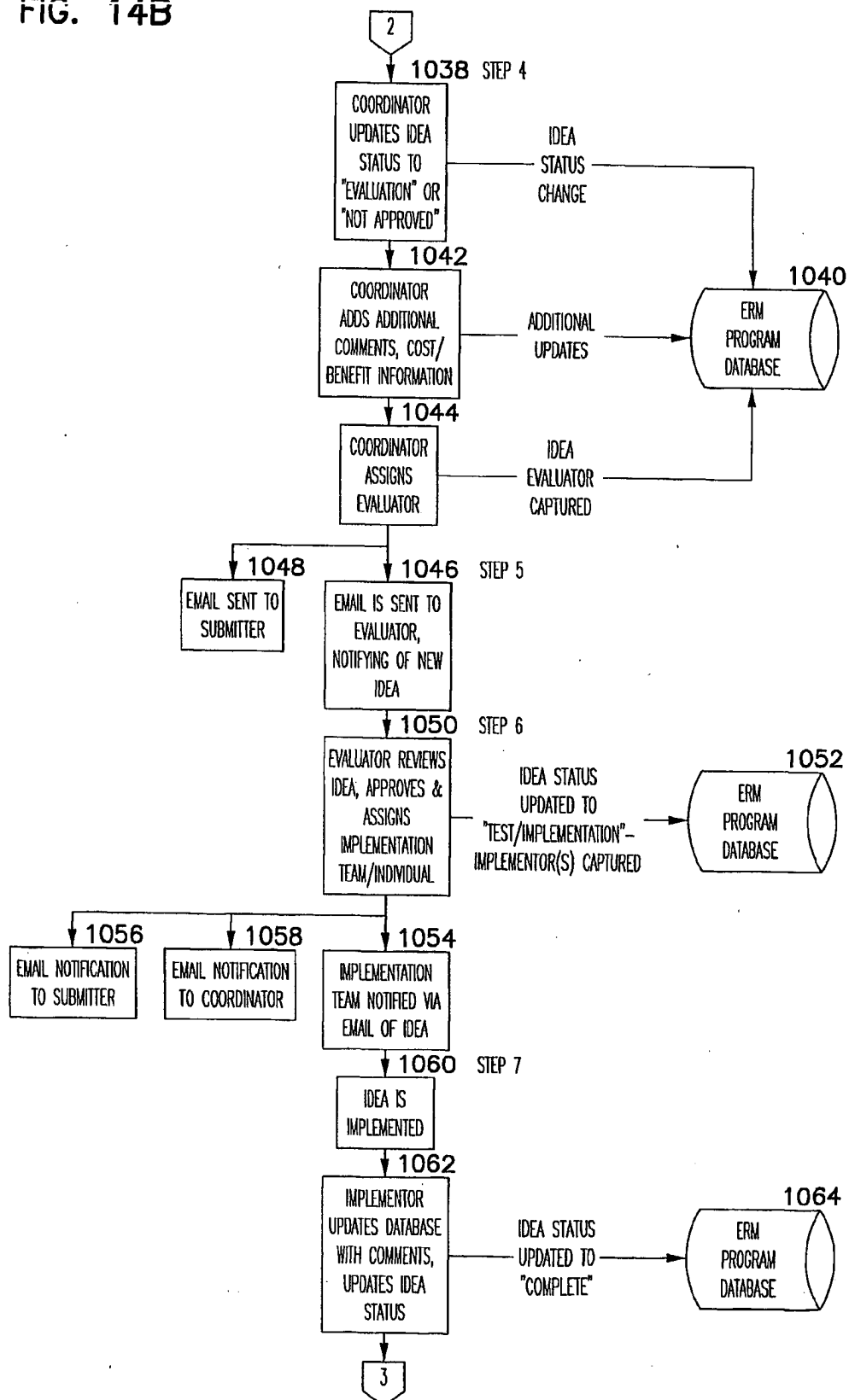
26/29

FIG. 14A



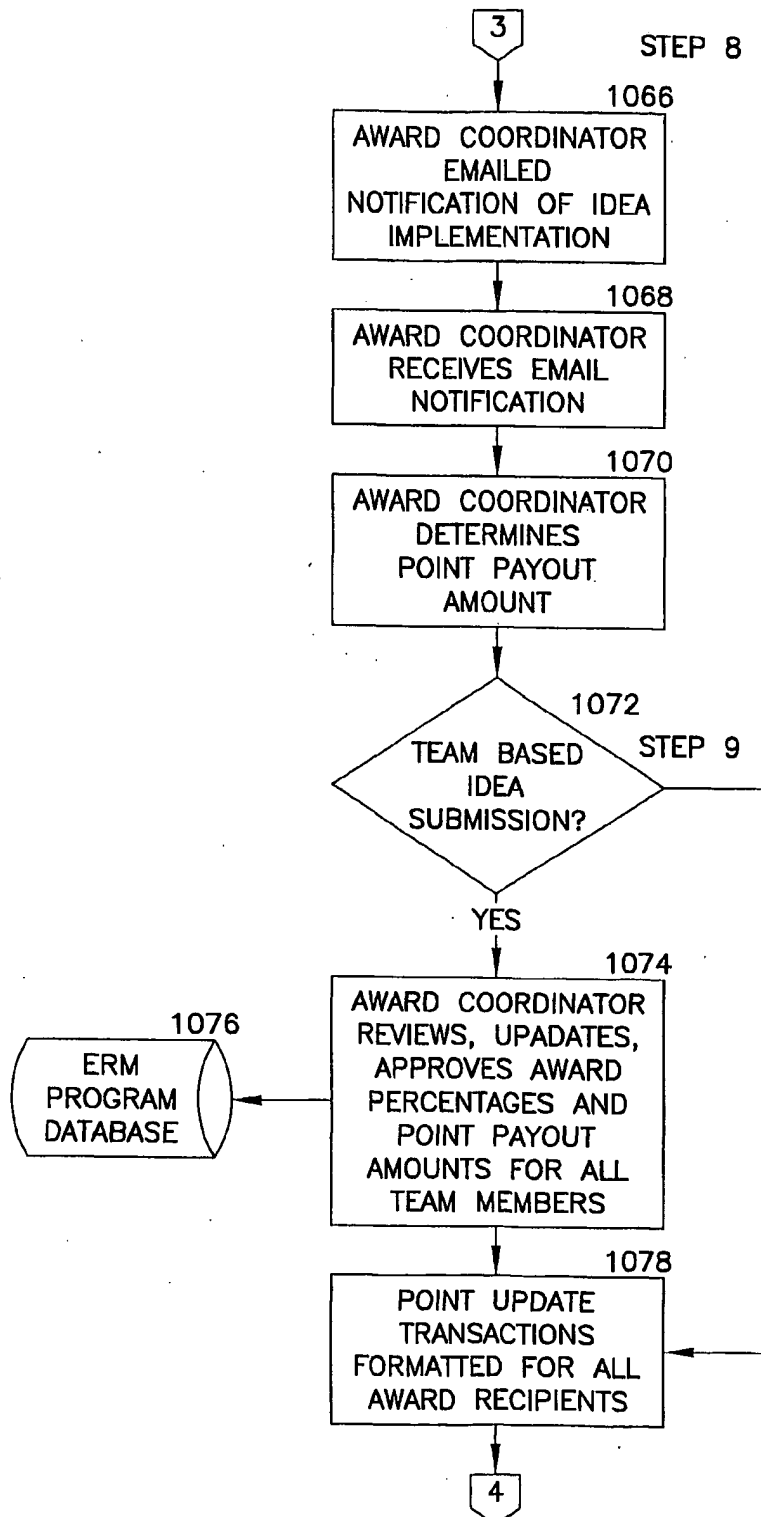
27/29

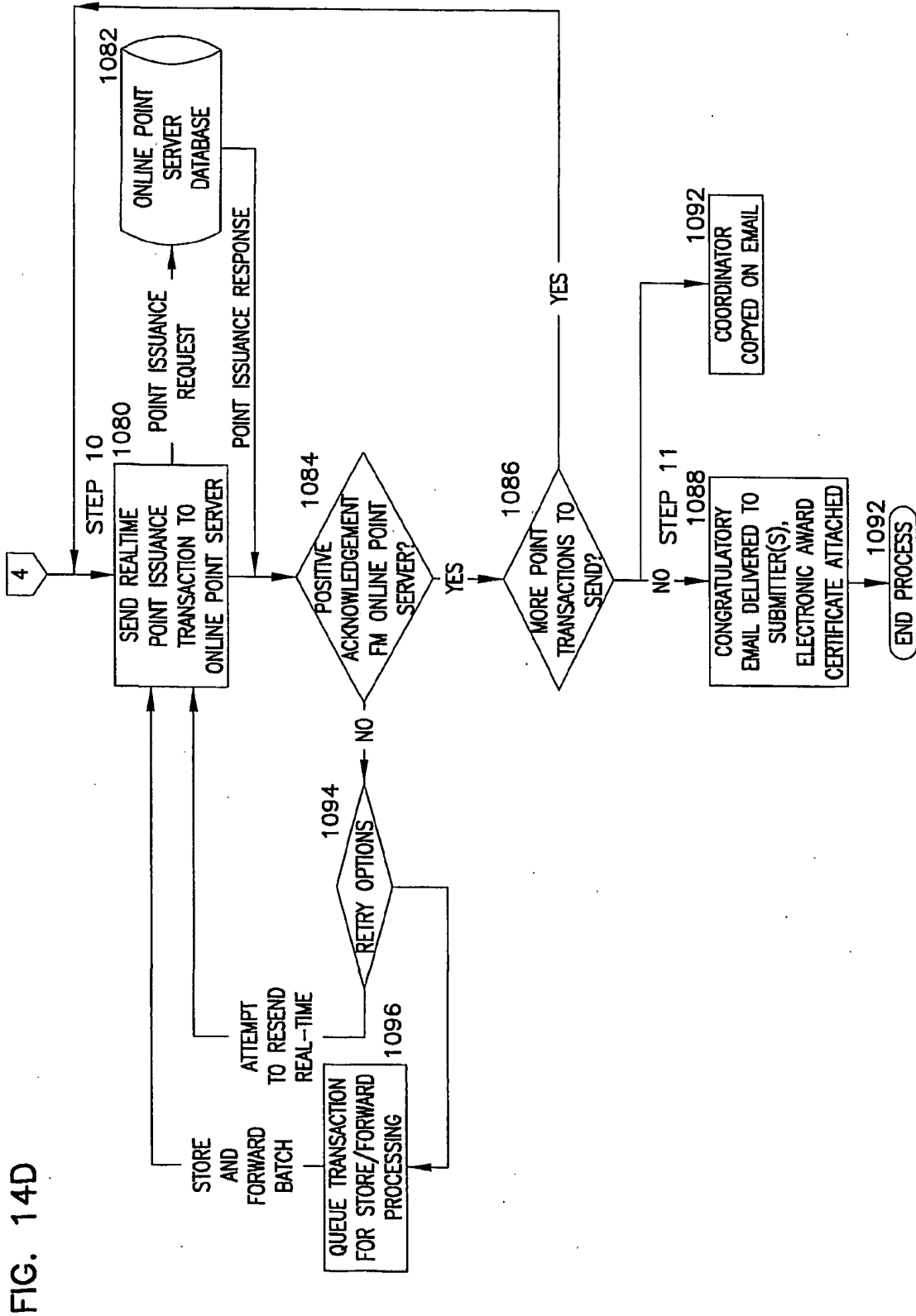
FIG. 14B



28/29

FIG. 14C





DECLARATION OF NON-ESTABLISHMENT OF INTERNATIONAL SEARCH REPORT

(PCT Article 17(2)(a), Rules 13ter.1(c) and Rule 39)


Applicant's or agent's file reference 6973.258W001	IMPORTANT DECLARATION	Date of mailing(day/month/year) 17/09/2001
International application No. PCT/US 01/ 14311	International filing date(day/month/year) 03/05/2001	(Earliest) Priority date(day/month/year) 10/05/2000
International Patent Classification (IPC) or both national classification and IPC G06F17/60		
Applicant CARLSON MARKETING GROUP, INC.		

This International Searching Authority hereby declares, according to Article 17(2)(a), that **no international search report will be established** on the international application for the reasons indicated below

1. ☒ The subject matter of the international application relates to:
 - a. ☐ scientific theories.
 - b. ☐ mathematical theories
 - c. ☐ plant varieties.
 - d. ☐ animal varieties.
 - e. ☐ essentially biological processes for the production of plants and animals, other than microbiological processes and the products of such processes.
 - f. ☒ schemes, rules or methods of doing business.
 - g. ☐ schemes, rules or methods of performing purely mental acts.
 - h. ☐ schemes, rules or methods of playing games.
 - i. ☐ methods for treatment of the human body by surgery or therapy.
 - j. ☐ methods for treatment of the animal body by surgery or therapy.
 - k. ☐ diagnostic methods practised on the human or animal body.
 - l. ☐ mere presentations of information.
 - m. ☐ computer programs for which this International Searching Authority is not equipped to search prior art.
2. ☐ The failure of the following parts of the international application to comply with prescribed requirements prevents a meaningful search from being carried out:

☐ the description
 ☐ the claims
 ☐ the drawings
3. ☐ The failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions prevents a meaningful search from being carried out:

☐ the written form has not been furnished or does not comply with the standard.
 ☐ the computer readable form has not been furnished or does not comply with the standard.
4. Further comments:

Name and mailing address of the International Searching Authority  European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer María Rodríguez Nóvoa
--	--

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 203

Claims 1-18 relate to commonplace technological features for performing a business method. Although these claims do not literally belong to the method category, they essentially claim protection for a commercial effect. With reference to the Guidelines, B-VIII, points 1-6, the International Searching Authority considers that searching such commercial features would serve no useful purpose. This applies to the remaining commonplace technological features of these claims as well.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.